Service
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Service Manual

Horizontal Frequency

30 kHz to 83 kHz

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SAFETY NOTICE

ANY PERSON ATTEMPTING TO SERVICE THIS CHASSIS MUST FAMILIARIZE HIMSELF WITH THE CHASSIS AND BE AWARE OF THE NECESSARY SAFETY PRECAUTIONS TO BE USED WHEN SERVICING ELECTRONIC EQUIPMENT CONTAINING HIGH VOLTAGES.

CAUTION: USE A SEPARATE ISOLATION TRANSFOMER FOR THIS UNIT WHEN SERVICING

Revision List

Revision	Release Date	Revise history	TPV model
A00	May.-15-2008	Initial Release	TA8CMUHKWMDDBZ TA8GMUHKWMDDBZ TA8GMUNMWMDDBC TA8GMUNLWMDLBC TA8CMUNLWMDLBC TA8GMUNJWMDDBC TA8CMUNJWMDDBC TA8GMUNMWMDLBC TA8CMUNMWMDLBC TA8GMUNFWMDLBC TA8CMUNFWMDLBC
A01	Jun.-5-2008	Add “Camera & Microphone test sop” in item 6	ALL
A02	Jul.-05-2008	Add TPV Model in item 13&14	TA8GMUHKWMDDBC TA8GMUNKWMDDBC TA8CMUNKWMDDBC TA8GMUNKWMDDBZ TA8CMUNKWMDDBZ TA8GMUNBWMDDBC TA8CMUNBWMDDBC TA8GMUNBWMDDBZ TA8CMUNBWMDDBZ TA8GMUNBWMDD4C TA8CMUNBWMDD4C
A03	Dec.-02-2008	Add TPV Model in item 14	TA8GMUNKWMDRBZ
A04	Dec.-22-2008	Change Y value to Ymin (min luminance value）in item 10	ALL

ECN History

ECN No.	Change Description	Service Deposition	Cut-in date	MSR

Important Safety Notice

Proper service and repair is important to the safe, reliable operation of all AOC Company Equipment. The service procedures recommended by AOC and described in this service manual are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It is also important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. AOC could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, AOC has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by AOC must first satisfy himself thoroughly that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.
Hereafter throughout this manual, AOC Company will be referred to as AOC.

WARNING
Use of substitute replacement parts, which do not have the same, specified safety characteristics may create shock, fire, or other hazards.

Under no circumstances should the original design be modified or altered without written permission from AOC. AOC assumes no liability, express or implied, arising out of any unauthorized modification of design.

Servicer assumes all liability.

FOR PRODUCTS CONTAINING LASER:
DANGER-Invisible laser radiation when open. AVOID DIRECT EXPOSURE TO BEAM.
CAUTION-Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
CAUTION -The use of optical instruments with this product will increase eye hazard.

TO ENSURE THE CONTINUED RELIABILITY OF THIS PRODUCT, USE ONLY ORIGINAL MANUFACTURER'S REPLACEMENT PARTS, WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THIS SERVICE MANUAL.

Take care during handling the LCD module with backlight unit
-Must mount the module using mounting holes arranged in four corners.
-Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
-Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
-Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
-Make certain that treatment person’s body is grounded through wristband.
-Do not leave the module in high temperature and in areas of high humidity for a long time.
-Avoid contact with water as it may a short circuit within the module.
-If the surface of panel becomes dirty, please wipe it off with a soft material. (Cleaning with a dirty or rough cloth may damage the panel.)

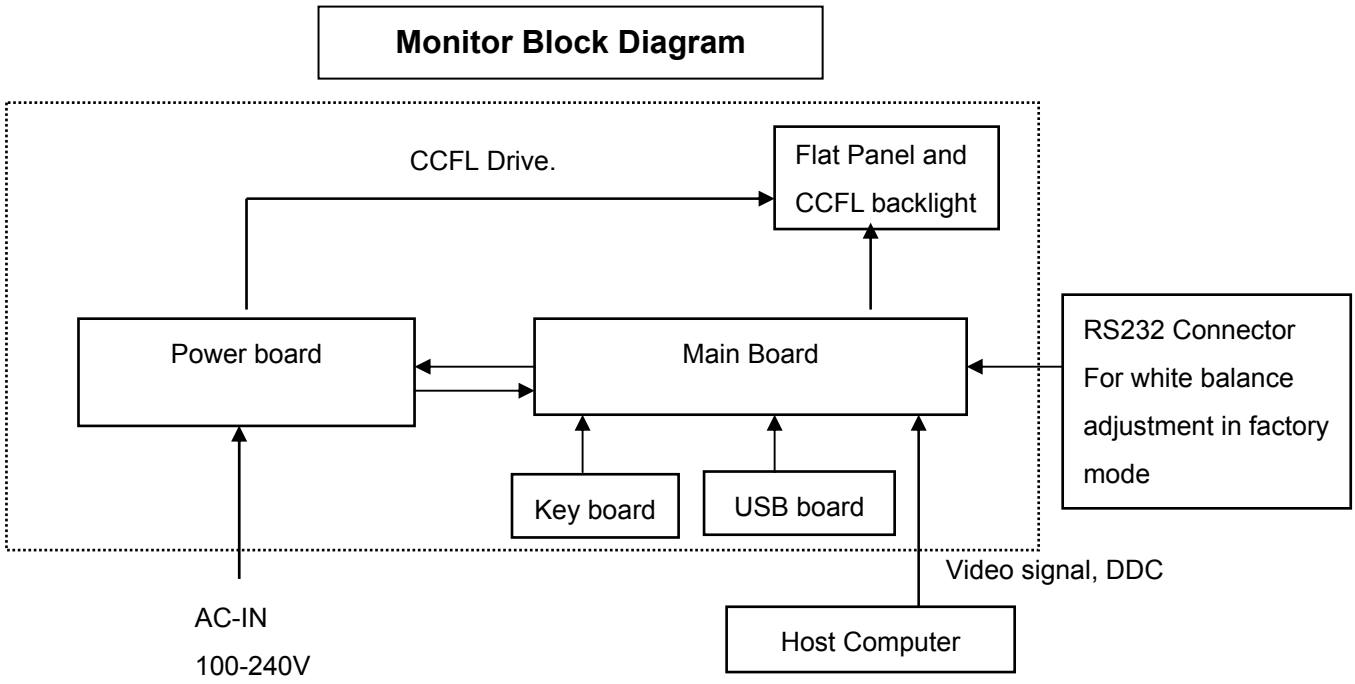
1. Monitor Specifications

LCD Panel	Screen type	Active matrix - TFT LCD
	Panel Type	CLAA201WA04A 336 FZ CPT
	Size	20.1 inches (20.1-inch viewable image size)
	Pixel pitch	0.258 mm (H) x 0.258mm(V)
	Viewable angle	160° (vertical) typ, 160° (horizontal) typ
	Response time	2 ms typical (Grey to Grey)
Input	Video	R, G, B Analog Interface, DVI digital Interface
	Separate Sync	H/V TTL
	H-Frequency	30kHz – 83kHz
	V-Frequency	53 - 76Hz
Dynamic contrast ratio		2000:1 (typical)
Luminance output		300 CD/m ²(typical)
Max. Resolution		1680 x 1050 at 60 Hz
Plug & Play		VESA DDC
EPA ENERGY STAR®	ON Mode	<45W
	OFF Mode	<1W
Input Connector		15-pin D-subminiature, blue connector; DVI-D, white connector
Preset display area:		Height : 393.10 mm (15.48 inches) Width: 481.50mm (18.96 inches)
Power Source		100 to 240 VAC / 50 or 60 Hz ± 3 Hz / 1.5A
Video display capabilities (DVI playback)		480i/480p/576i/576p/1080i/1080p (Supports HDCP)
Environmental Considerations		Operating Temp: 5° to 35°C Operating Humidity: 10% to 80% Storage Temp.: -20° to 60°C
Weight		Weight with packaging: 18.70 lbs (8.50 kg) Weight with stand assembly and cables: 13.64 lbs (6.20 kg) Weight without stand assembly: 10.56 lbs (4.8 kg) Weight of stand assembly: 2.93 lbs (1.34 kg)

2. LCD Monitor Description

The LCD monitor will contain a main board, power board, key board and a USB board which house the flat panel control logic, brightness control logic and DDC.

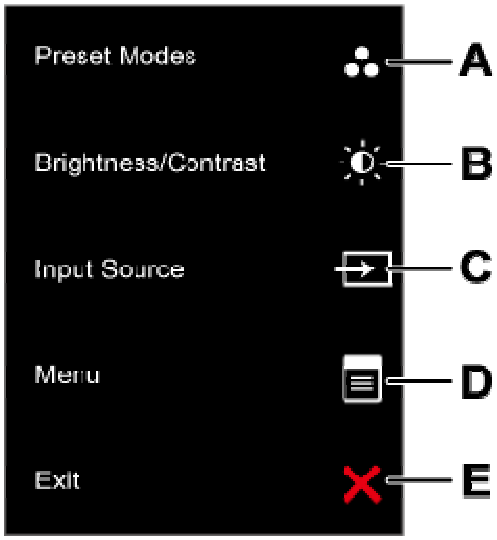
The power board will provide AC to DC Inverter voltage to drive the backlight of panel and the main board chips each voltage.



3. Operation instructions

3.1 Using the Front Panel Controls

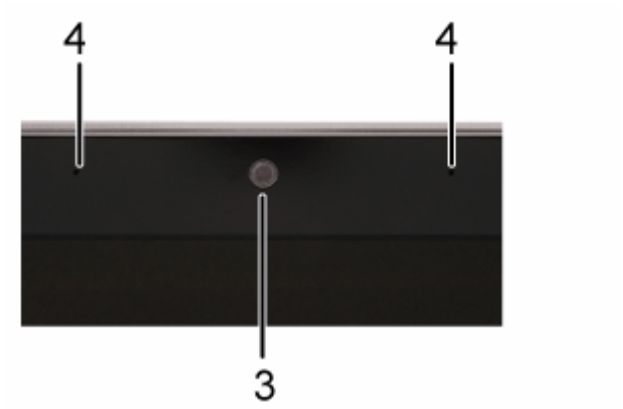
Use the buttons on the front of the monitor to adjust the image settings.



Front panel Button		Description
A	**Preset modes**	Use the Preset modes button to choose from a list of preset color modes.
B	**Brightness / Contrast**	Use the Brightness / Contrast button to direct access to the "Brightness" and "Contrast" control menu.
C	**Input source**	Use the Input source button to select different video signals that may be connected to your monitor.
D	**Menu**	Use the Menu button to open the on-screen display(OSD).
E	**Exit**	Use the Exit button to exit on-screen display(OSD) from menu and sub-menus.

Use the buttons on the front of the monitor to adjust the image settings.

3.2 Control Buttons

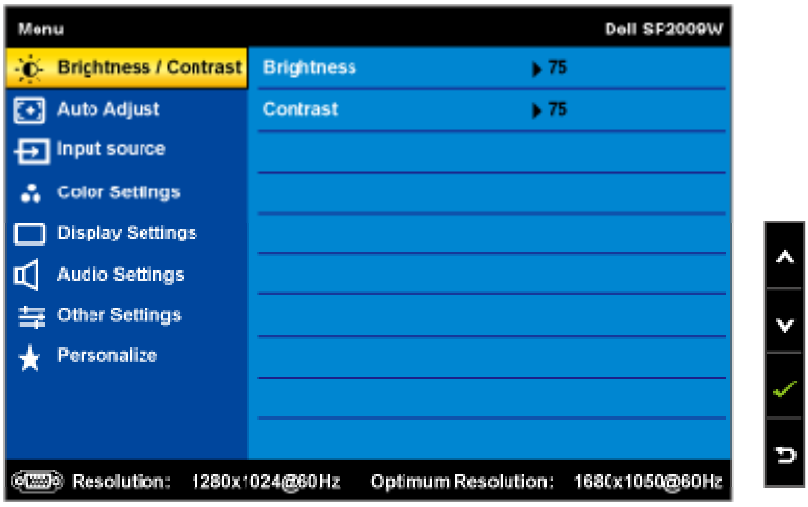


Label	Description
1	Power button
2	Capacitive touch buttons (For more information, see Operating the Monitor)
3	Webcam
4	Microphone

3.3 Adjusting the Picture

1. Press the button to open the OSD menu and display the main menu.

Main Menu



2. Press the and buttons to toggle between options in the Menu. As you move from one icon to another, the option name is highlighted.

3. To select the highlighted item on the menu press the again.

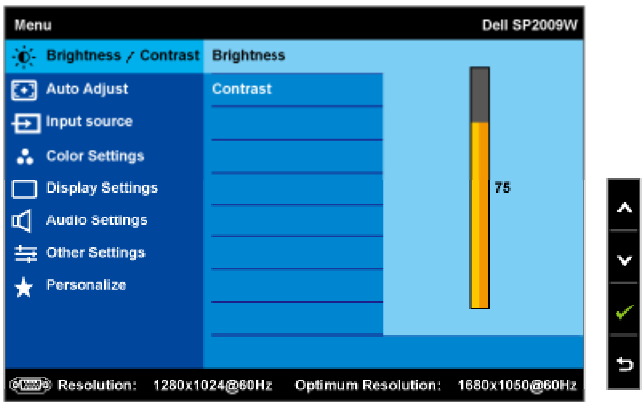
4. Press the and buttons to select the desired parameter.

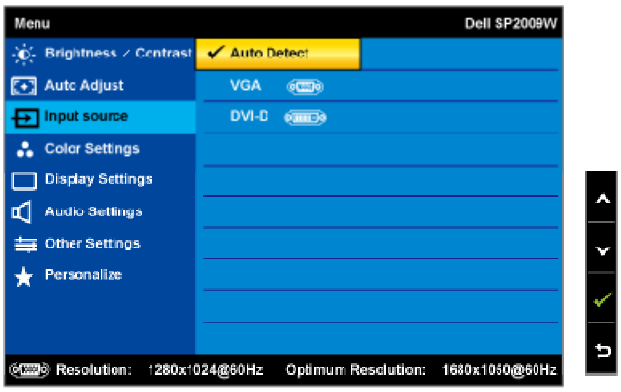
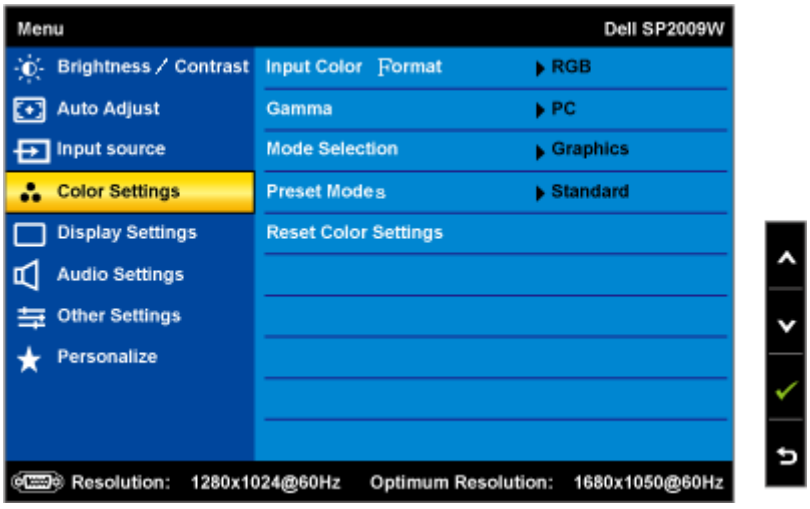
5. Press the button to enter the slide bar and then use the or button, according to the indicators on the menu, to make your changes.

6.Select the to return to previous menu without accepting current settings or to accept and return to previous menu.

The table below provides a list of all the OSD menu options and their functions.

Icon	Menu and Submenus	Description
	BRIGHTNESS/CONTRAST	Use the Brightness and Contrast menu to adjust the Brightness/Contrast.

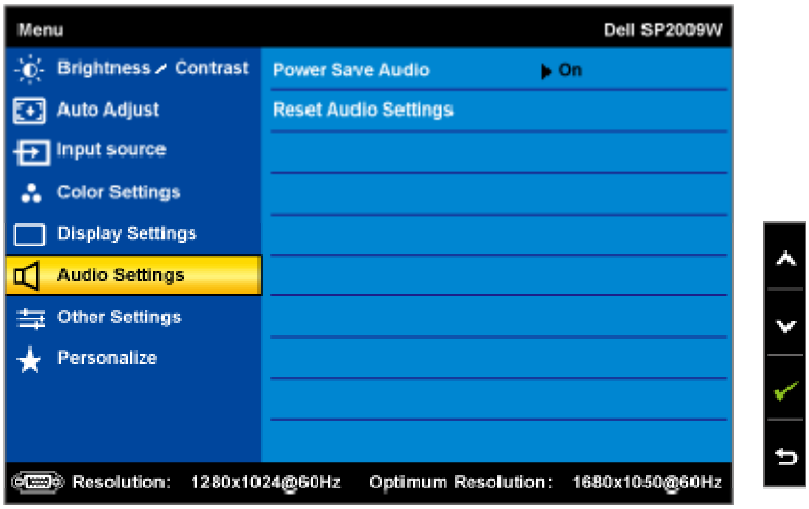
		
	Back	Press to go back to the main menu.
	Brightness	Allows you to adjust the brightness or luminance of the backlight. Press the button to increase brightness and press the button to decrease brightness (min 0 ~ max 100).
	Contrast	Allows you to adjust the contrast or the degree of difference between darkness and lightness on the monitor screen. Adjust brightness first, and adjust contrast only if you need further adjustment. Press the button to increase contrast and press the button to decrease contrast (min 0 ~ max 100).
	Auto Adjust	Use this button to activate automatic setup and adjust menu. The following dialog appears on a black screen as the monitor self-adjusts to the current input:
		Auto Adjustment allows the monitor to self-adjust to the incoming video signal. After using Auto Adjustment, you can further tune your monitor by using the Pixel Clock (Coarse) and Phase (Fine) controls under Image Settings.
		NOTE: Auto Adjust does not occur if you press the button while there are no active video input signals or attached cables.

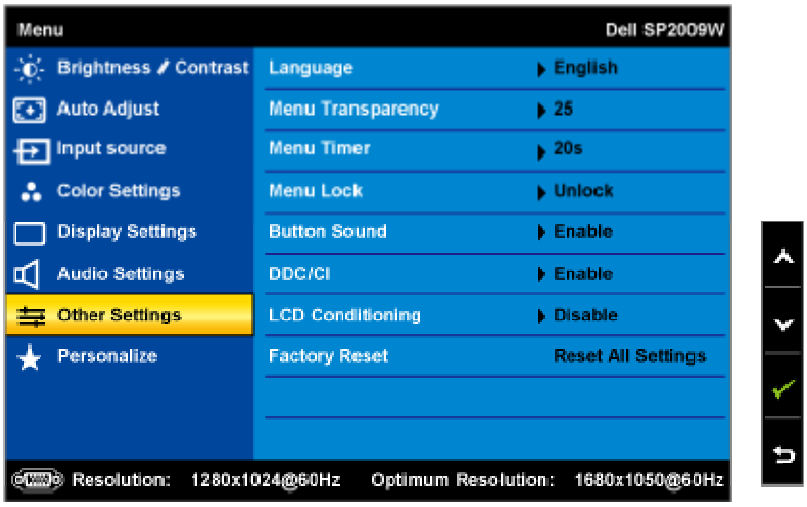
	Input Source	Use the Input Source menu to select different video signals that may be connected to your monitor.
		
		Push to go back to the main menu
		Select VGA input when you are using the analog (VGA) connector. Push to select the VGA input source.
		Select DVI-D input when you are using the digital (DVI) connector. Push to select the DVI input source. Select Auto select to let the monitor search for available input signals.
	COLOR SETTINGS **Color setting mode submenu**	Use the **Color Setting** menu to adjust the monitor's color settings. 

	Back	Press to go back to the main menu.
	Input Color Format	Allows you to set the video input mode to. • **RGB**: Select this option if your monitor is connected to a computer or DVD • player using the HDMI cable or the HDMI to DVI adapter. • **YPbPr**: Select this option if the your DVD player supports only YPbPr output.
	Mode Selection	Allows you to set the display mode to: • **Graphics**: Select this mode if your monitor is connected to your computer. • **Video**: Select this mode if you monitor is connected to a DVD player. **NOTE:** Depending upon the Display Mode you select the Preset Modes available for your monitor change.
	Preset Mode	Allows you to choose from a list of preset color modes. In the **Graphics** mode, you can set the color to the following preset values: • **Standard**: Loads the monitor's default color settings. This is the default preset mode. • **Multimedia**: Loads color settings ideal for multimedia applications. • **Game**: Loads color settings ideal for most gaming applications. • **Warm**: Increase the color temperature. The screen appears warmer with a red/yellow tint. • **Cool**: Decreases the color temperature. The screen appears cooler with • a blue tint. • **Custom (RGB)**: Allows you to manually adjust the color settings. Press the and buttons to adjust the Red, Green, and Blue values and create your own preset color mode. In the **Video** mode, you can set the color to the following preset values: • **Movie**: Loads color settings ideal for movies. This is the default preset mode. • **Game**: Loads color settings ideal for most gaming applications.

		• **Sports**: Loads color settings ideal for sports. • **Nature:** Loads color settings ideal for nature.
	Hue	Allows you to adjust the skin tone of the image. Use or to adjust the hue from '0' to '100'. **NOTE:** Hue adjustment is available only in the **Video** mode.
	Saturation	Allows you to adjust the color saturation of the image. Use or to adjust the saturation from '0' to '100'. **NOTE:** Saturation adjustment is available only in the **Video** mode.
	Color Reset	Resets your monitor's color settings to the factory defaults.
	DISPLAY SETTINGS **Display setting mode submenu**	Use the **Displays Settings** menu to adjust the sharpness, dynamic contrast, response time, and zoom.
	Back	Press to go back to the main menu.
	Wide Mode	Allows you to change the image scale with various default settings. **NOTE: Wide Mode** is not available at video resolutions greater than 1680x1050. However, **16:9** and **Fill** will be available for video timing.

	Horizontal position	Use the and buttons to adjust image left and right (min 0 ~ max 100). **NOTE:** When using DVI source, the Horizontal Position setting is not available.
	Vertical Position	Use the and buttons to adjust image up and down (min 0 ~ max 100). **NOTE:** When using DVI source, the Vertical Position setting is not available.
	Zoom	Allows you to zoom in to specific area of interest on your monitor. Use and buttons to adjust the zoom from '0' to '100'. **NOTE:** Zoom will reset to default after power cycling or after power save recovery. **NOTE:** Zoom default setting will be zero when using PC format (RGB color space) and 10 when using the video format from DVD players (YPbPr color space).
	Phase	If satisfactory results are not obtained using the phase adjustmenu, use the Pixel Clock (coarse) adjustmenu and then use Phase (fine). **NOTE:** Pixel Clock and Phade Adjustments are only available for "VGA" input.
	Sharpness	Allows you to increase or decrease the sharpness of the image. Use and buttons to adjust the sharpness from '0' to '100'.
	Dynamic Contrast	The dynamic contrast helps get a higher contrast if you choose Game preset, Movie Preset, Sports Preset and Nature Preset. Use the button to enable the Dynamic Contrast adjustment. Use the button to disable the Dynamic Contrast adjustment. **NOTE:** Brightness control is disabled in Dynamic Contrast mode.
	Response Time	Response time is the time required for an LCD pixel to change from fully active (black) to fully inactive (white), then back to fully active again. You can set the response time to:

	Display Reset	• **Normal** • **Overdrive** (default). Resets the monitor's display settings to the factory defaults.
	AUDIO SETTINGS	Use the **Audio Settings** to adjust the audio settings.
	Audio Setting mode submenu	
	Power Save Audio	Allows you to turn on or off the power to the audio during the audio power save mode. Default is "On". **On** — Allows you to turn off the power to the sound bar during monitor standby. **Off** — Allows you to turn on the power to the sound bar during monitor standby.
	Reset Audio Setting	Resets your monitor audio settings to the factory defaults.
	Exit Menu	Press to exit the OSD main menu and press to accept changes.
	OTHER SETTINGS	



Back Press to go back to the main menu.

Language Allows you to set the OSD display to one of five languages: English, Espanol, Francais, Deutsch, or Japanese.

Menu Transparency Allows you to adjust the OSD background from opaque to transparent.

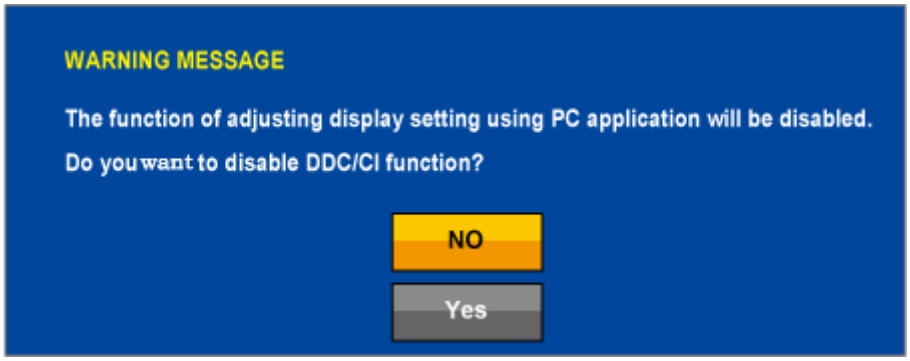
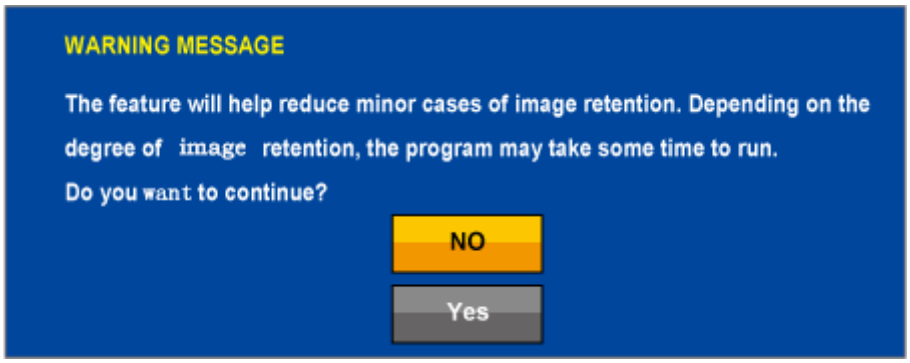
Menu Timer Allows you to set the time for which the OSD remains active after you press a button on the monitor.

Use the and buttons to adjust the slider in 1 second increments, from 5 to 60 seconds.

Menu Lock Controls user access to adjustments. When **Lock** is selected, no user adjustments are allowed. All buttons are locked except button.

Button Sound Turns on or off the button sound.

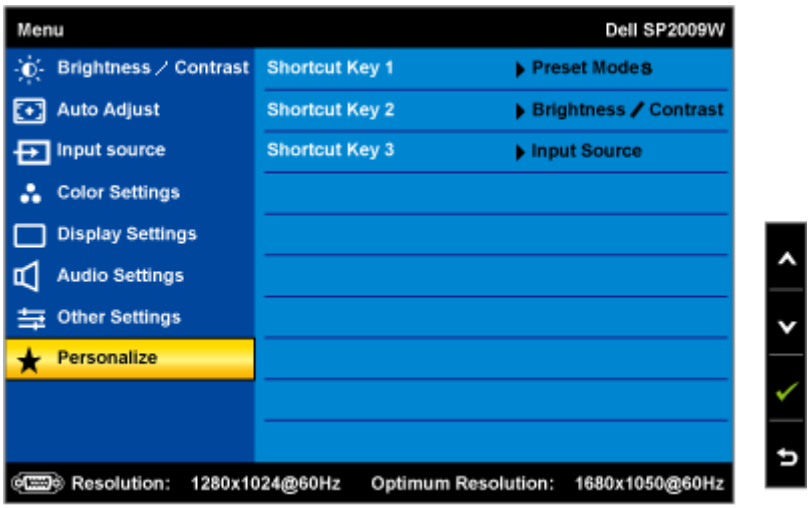
DDC/CI DDC/CI (Display Data Channel/Command Interface) allows a software on your computer to adjust the monitor display settings like the brightness, color balance etc. **Enable** (Default): Optimizes the performance of your monitor and provides a better

		customer experience. **Disable**: Disables the DDC/CI option and the following message appears on the screen.  Select **Yes** to disable DDC/CI or **No** to return.
	LCD Conditioning	LCD conditioning helps eliminate any image retention and may take several hours. **NOTE:** Severe cases of image retention are known as burn-in. LCD Conditioning does not remove burn-in. **Disable**: This is the default option. **Enable**: Enables LCD conditioning and the following message appears on the screen. Select Yes to proceed and No to return.  **NOTE:** Press any button on the monitor to terminate LCD Conditioning at any time.

Factory Reset

Resets all OSD settings to the factory preset values.

Personalize



Allow you to adjust shortcut key button for preset mode. Brightness & Contrast

Auto Adjust and Input source.

OSD Warning Messages

The following warning messages may appear on the screen to indicate that the monitor is out of synchronization.

Dell SP2009W
WARNING MESSAGE
Cannot display this video mode.
please change the screen resoulation
to 1680 x 1050 @ 60 Hz(optimum).
Dell SP2009W
WARNING MESSAGE
Cannot display this video mode.
please change the screen resoulation
to 1680 x 1050 @ 60 Hz(optimum).

This means that the monitor cannot synchronize with the signal that it is receiving from the computer. Either the signal is too high or too low for the monitor to use. See Specifications for the Horizontal and Vertical frequency ranges addressable by this monitor. Recommended mode is 1680 X 1050 at 60Hz.

Dell SP2009W
WARNING MESSAGE
There is no signal coming from your computer.
Press any key on the keyboard or mouse to wake it.
Dell SP2009W
WARNING MESSAGE
There is no signal coming from your computer.
Press any key on the keyboard or mouse to wake it.

If you press any button other than the power button one of the following messages will appear depending on the selected input:

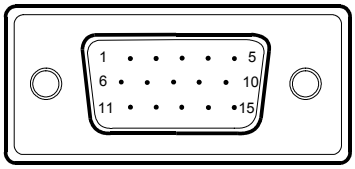
When monitor enters Power Save mode, the following message appears :

See Solving Problems for more information.

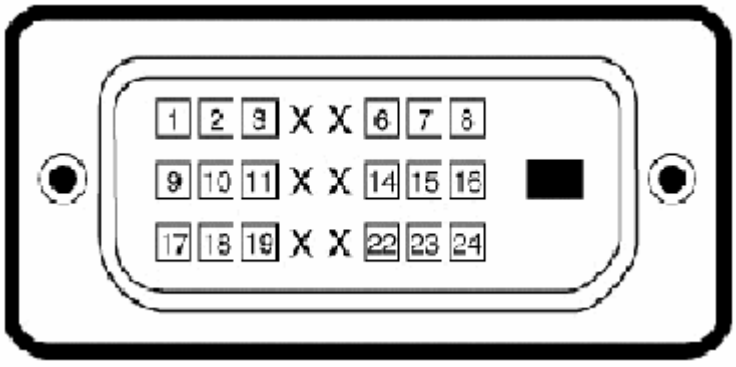
4. Input/Output Specification

4.1 Input Signal Connector

VGA Connector:

Pin No.	Description	Pin No.	Description
1.	Red Video	9.	DDC +5V
2.	Green Video	10.	GND-sync
3.	Blue Video	11.	GND
4.	GND	12.	DDC data
5.	Self-test	13.	H-Sync
6.	R-Ground	14.	V-Sync
7.	G-Ground	15.	DDC clock
8.	B-Ground		
VGA Connector layout			
			

DVI Connector:



Note: Pin 1 is at the top right.

Pin	Signal Assignment	Pin	Signal Assignment	Pin	Signal Assignment
1	T.M.D.S. Data 2-	9	TMDS RX1-	17	TMDS RX0-
2	T.M.D.S. Data 2+	10	TMDS RX1+	18	TMDS RX0+
3	TMDS Ground	**11**	TMDS Ground	19	TMDS Ground
4	Floating	12	Floating	20	Floating
5	Floating	13	Floating	21	Floating
6	DDC Clock	**14**	+5V Power	22	TMDS Ground
7	DDC Data	**15**	Self test	23	TMDS Clock+
8	Floating	**16**	Hot Plug Detect	24	TMDS Clock-

4.2 Factory Preset Display Modes

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (Horizontal/Vertical)
VESA, 720 x 400	31.5	70.0	28.3	-/+
VESA, 640 x 480	31.5	60.0	25.2	-/-
VESA, 640 x 480	37.5	75.0	31.5	-/-
VESA, 800 x 600	37.9	60.3	40.0	+/+
VESA, 800 x 600	46.9	75.0	49.5	+/+
VESA, 1024 x 768	48.4	60.0	65.0	-/-
VESA, 1024 x 768	60.0	75.0	78.8	+/+
VESA, 1152 x 864	67.5	75.0	108.0	+/+
VESA, 1280 x 1024	64.0	60.0	108.0	+/+
VESA, 1280 x 1024	80.0	75.0	135.0	+/+
VESA, 1680 x 1050	65.3	60.0	146.3	-/+
VESA, 1680 x 1050	64.7	59.9	119.0	+/-

4.3 Power Supply Requirements

A/C Line voltage range	: 100 V ~ 240 V
A/C Line frequency range	: 50 ± 3Hz, 60 ± 3Hz
Current	: 1.5A max at 100V; 0.8A max at 240 V
Peak surge current	: < 60A peak at 240 VAC and cold starting
Leakage current	: < 3.5mA
Power line surge	: No advance effects (no loss of information or defect) with a maximum of 1 half-wave missing per second
DC output Voltage	: 5VDC ± 5%; 12VDC± 5%

4.4 Panel Specification

CLAA201WA04 is 20.1”(51.11cm) color TFT-LCD (Thin Film Transistor Liquid Crystal Display) module composed of LCD panel, LVDS driver ICs, control circuit and backlight(CCFL, 4 tubes). By applying 8 bit digital data (6bits+Hi-FRC), 1680×1050, drived by 5 voltages,16.7M-color images are displayed on the 20.1” diagonal screen. The module structure is fixed by iron frame, without the inverter for the backlight. Interface of data and control signals is typ.

4.4.1 Display Characteristics

ITEM	SPECIFICATION
Display Area(mm)	433.44 (H) × 270.9 (V) (20.1-inch diagonal)
Number of Pixels	1680 (H) × 1050(V)
Pixel Pitch(mm)	0.258(H) × 0.258(V)
Color Pixel Arrangement	RGB vertical stripe
Display Mode	NormallyWhite, TN
Number of Colors	16.7M(6bits+Hi-FRC)
Brightness(cd/m^2)	300cd/m^2 (Typ.)(center, 7.5mA)
Viewing Angle(H/V)	170/160 (Typ.)
Surface Treatment	Anti-glare, 3H
Power consumption(W)	34.0(Typ.) (w/o Inverter)
Module Size(mm)	459.4(W) × 296.4(H) ×16.6 (D) (Typ.)
Module Weight(g)	2850(Typ)
Backlight Unit	CCFL, 4 tubes(top × 2/bottom × 2) , Edge light

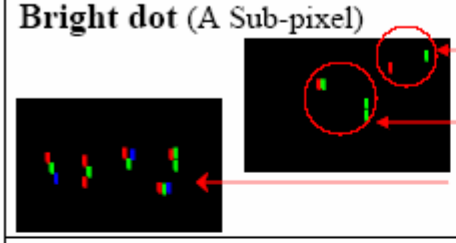
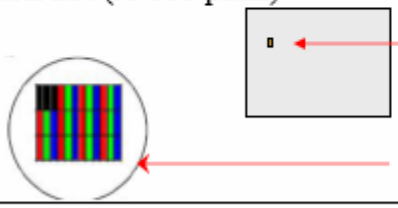
4.4.2 Optical Characteristics

The optical characteristics are measured under stable conditions at 25℃:

ITEM		SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Contrast (CEN)		CR	θ= ϕ = 0°	700	1000	--	--
Luminance (CEN)		L	θ= ϕ = 0°	250	300	--	cd/m^2
9P Uniformity		ΔL	θ= ϕ = 0°	75	80	--	%
Response Time		Tr+Tf	θ= ϕ = 0°	--	5	8	ms
Cross talk		CT	θ= ϕ = 0°	0	--	1	%
View angle	Horizontal	ϕ	CR≧10	150	170	--	Deg.
	Vertical	θ		140	160	--	Deg.
Color Coordinates	White	x	θ= ϕ = 0°	0.283	0.313	0.343	--
		y		0.299	0.329	0.359	
	Red	x		0.625	0.655	0.685	
		y		0.298	0.328	0.358	
	Green	x		0.247	0.277	0.307	
		y		0.589	0.619	0.649	
	Blue	x		0.115	0.145	0.175	
		y		0.051	0.081	0.111	
Gamut		CG	θ= ϕ = 0°	68	72		%
Gamma		γ		1.9	2.2	2.5	--

4.5 Definition of Pixel Defects

4.5.1 Spec.of Pixel Defect

Defect Type	Accept	Reject
Bright dot (A Sub-pixel)  One (Random) Two Adjacent Three Adjacent	N ≤ 0 N ≤ 0 N ≤ 0	N > 0 N > 0 N > 0
Partial Dot (Fig. 1) R, B : 20 ~ 50 % of a Dot G : 10 ~ 25% of a Dot	N ≤ 5	N > 5
Dark dot (A Sub-pixel)  One (Random) Two Adjacent Three Adjacent	N ≤ 5 N ≤ 2 N ≤ 1	N > 5 N > 2 N > 1
Maximum allowable number of dot defect (excluding Partial Dot)	N ≤ 5	N > 5
Minimum distance between defects, (Fig. 3)dark dot - to - dark dot	L ≥ 5mm	L < 5mm

4.5.2 Optical Characteristics Failure Criteria

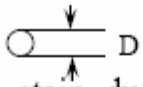
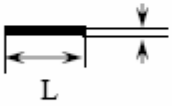
Max Brightness

Monthly Sampling 30pcs for each model (by lamp supplier)
Plot Distribution Chart and Calculate Cpk
Criteria :
X Bar (Mean) > Typical value
Cp > 1.33
PS:
Warm up time : 30 min
Setting : White pattern (typical lamp current)
Performed by ORT

Color Chroma

Sampling 30pcs for each model, measure the center point
Criteria : Typical value ± △ (RGB),
△ = 0.030 for existing MP panels
0.020 for new projects (defined in LCD RFQ)
0.015 for TCO-03 panel

4.5.3 FOS Spec.

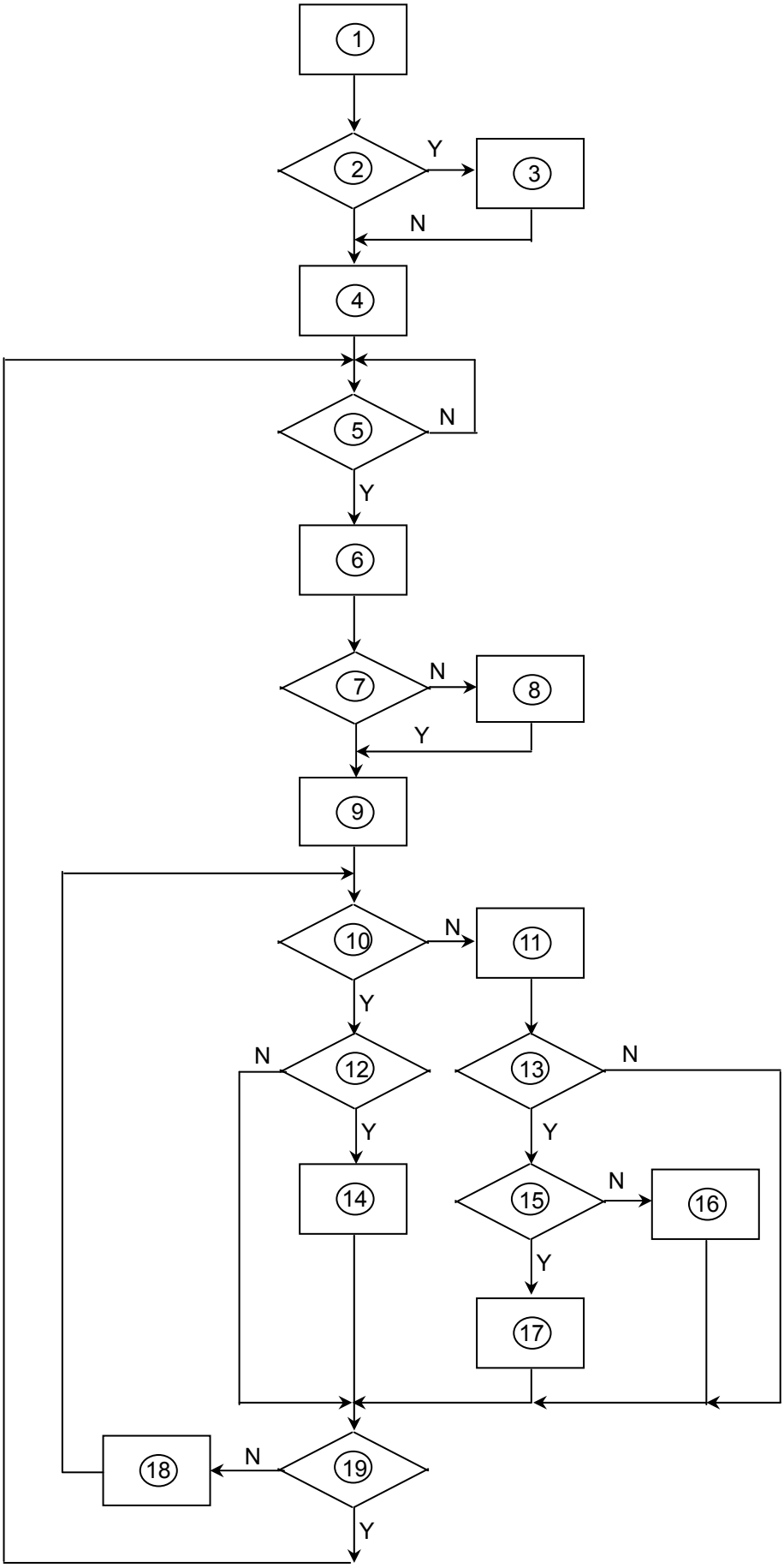
Defect Type	Accept (mm)	Reject (mm)
Dark / bright spot *1  (foreign material, white spot, stain, dust)	0.2< D ≤ 0.5 N ≤ 5	D > 0.5, N>0 0.2< D ≤0.5, N > 5
Bright line (light lint), or dark line (dark lint / hair)	0.01 < W ≤ 0.1 0.3 < L ≤ 7.0 N ≤ 3	W > 0.1 or L > 7.0 0.01 < W ≤ 0.1 0.3 < L ≤ 7.0, N > 3
Polarizer scratch 	0.01 < W ≤ 0.1 0.3 < L ≤ 7.0 N ≤ 3	W > 0.1 or L > 7.0 0.01 < W ≤ 0.1 0.3 < L ≤ 7.0, N > 3
Polarizer dent/bubble	0.3 < D ≤ 0.7 N ≤ 5	D > 0.7, N > 0 0.3< D ≤0.7, N > 5
Maximum allowable number of defects	N ≤ 8	N > 8

[D : diameter, W : width, L : length, N : count]

**1 : Translucent edge is ignored in measuring the diameter of spot.*

5. Block Diagram

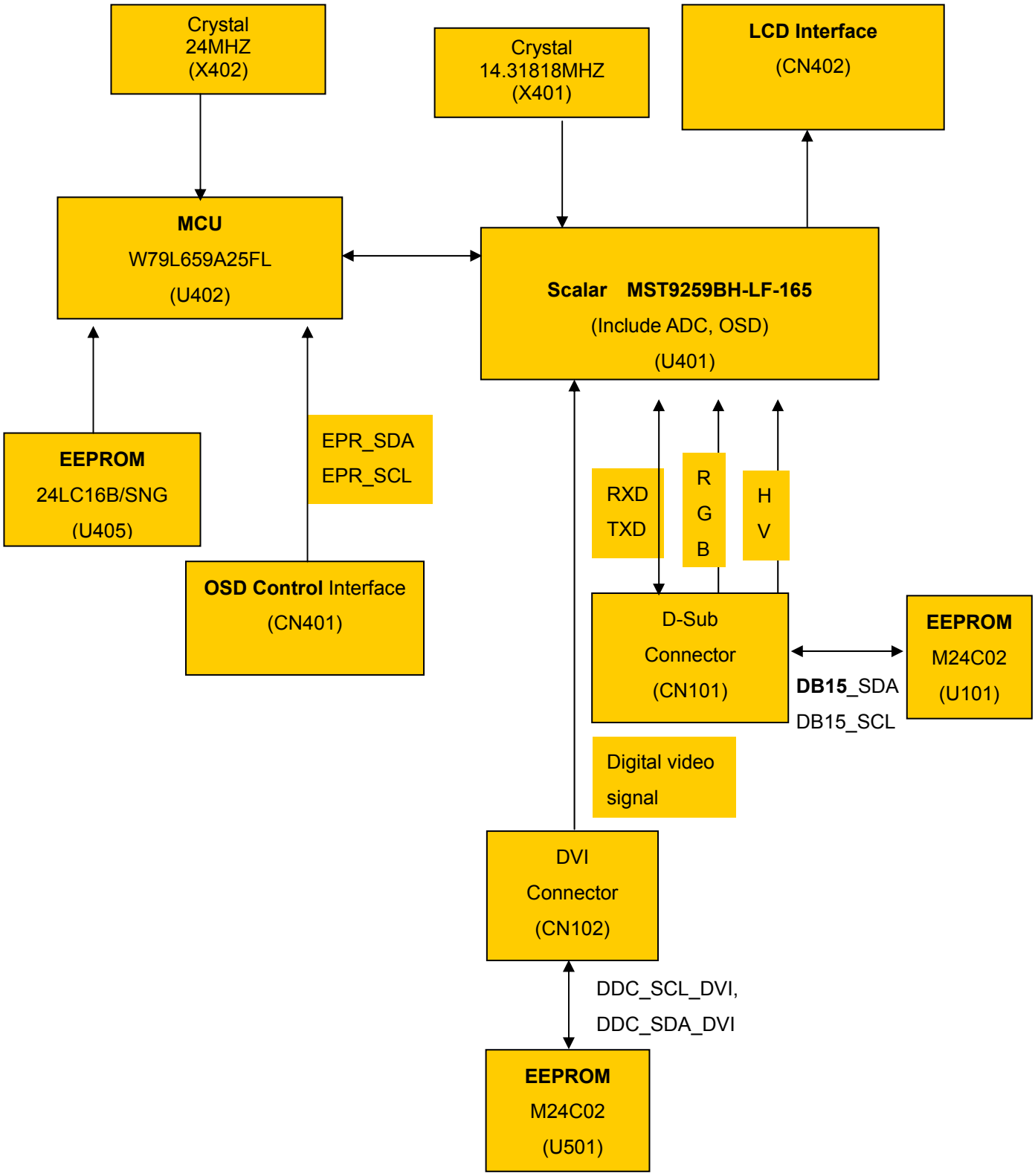
5.1 Software Flow Chart



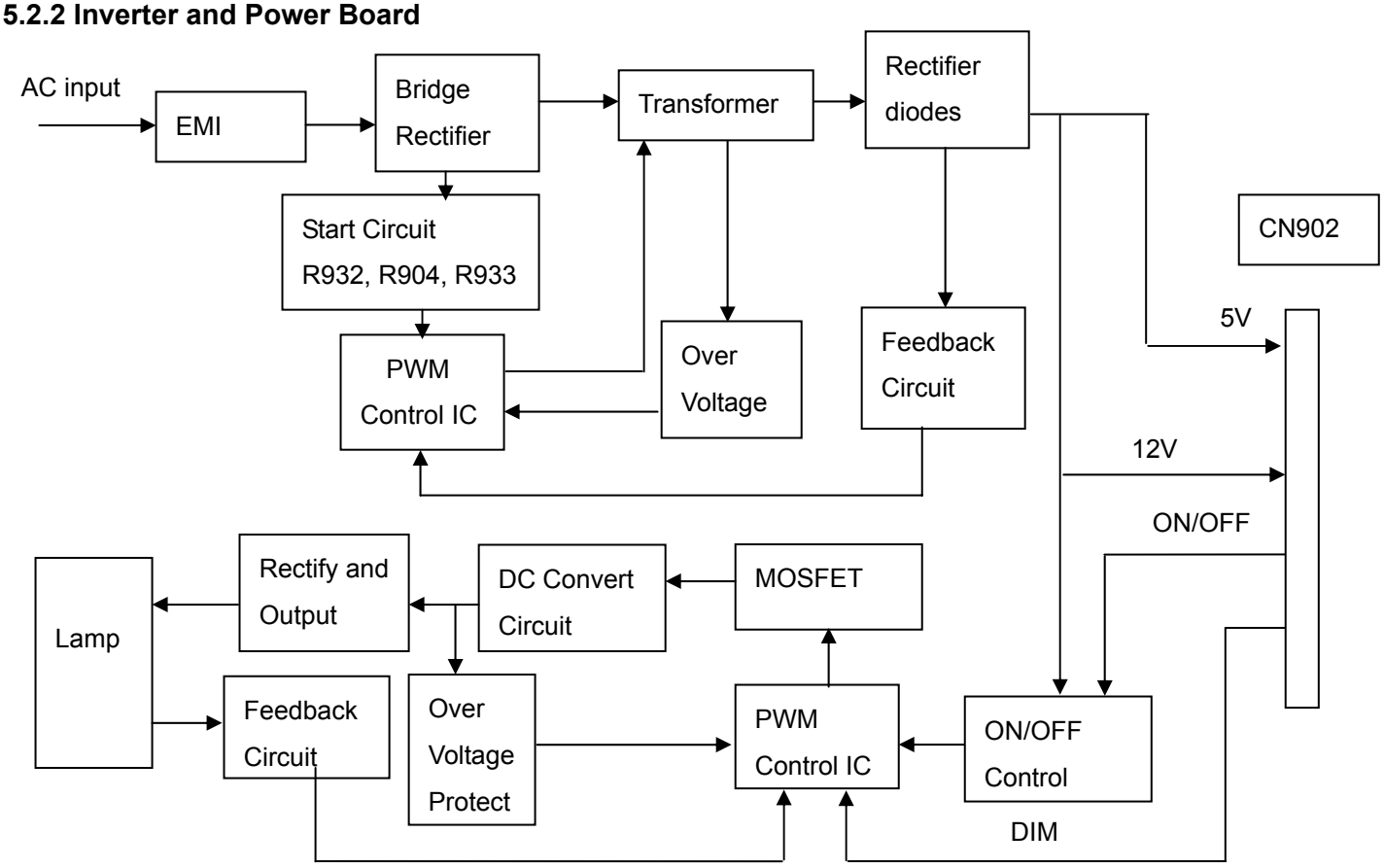
1) MCU Initializes.
2) Is the EEprom blank?
3) Program the EEprom by default values.
4) Get the PWM value of brightness from EEprom.
5) Is the power key pressed?
6) Clear all global flags.
7) Are the AUTO and SELECT keys pressed?
8) Enter factory mode.
9) Save the power key status into EEprom. Turn on the LED and set it to green color. Scalar initializes.
10) In standby mode?
11) Update the lifetime of back light.
12) Check the analog port, are there any signals coming?
13) Does the scalar send out an interrupt request?
14) Wake up the scalar.
15) Are there any signals coming from analog port?
16) Display "No connection Check Signal Cable" message. And go into standby mode after the message disappears.
17) Program the scalar to be able to show the coming mode.
18) Process the OSD display.
19) Read the keyboard. Is the power key pressed?

5.2 Electrical Block Diagram

5.2.1 Main Board



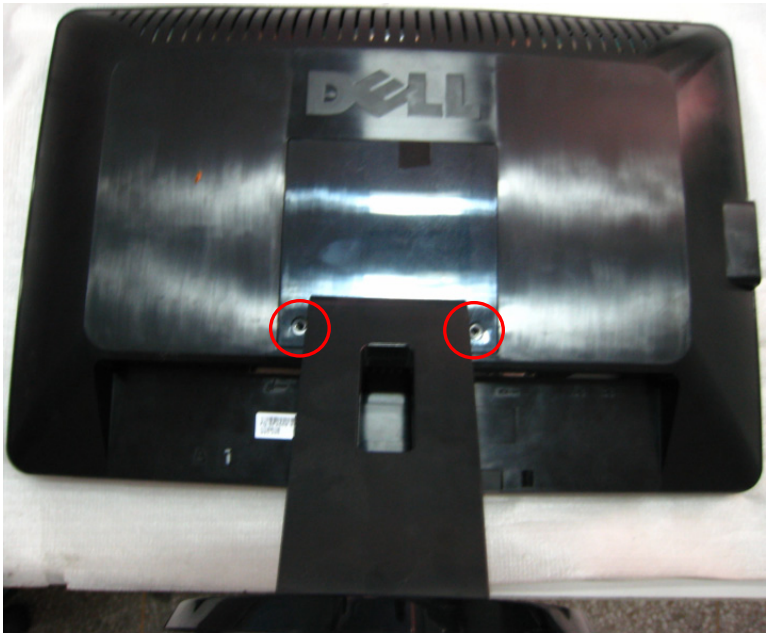
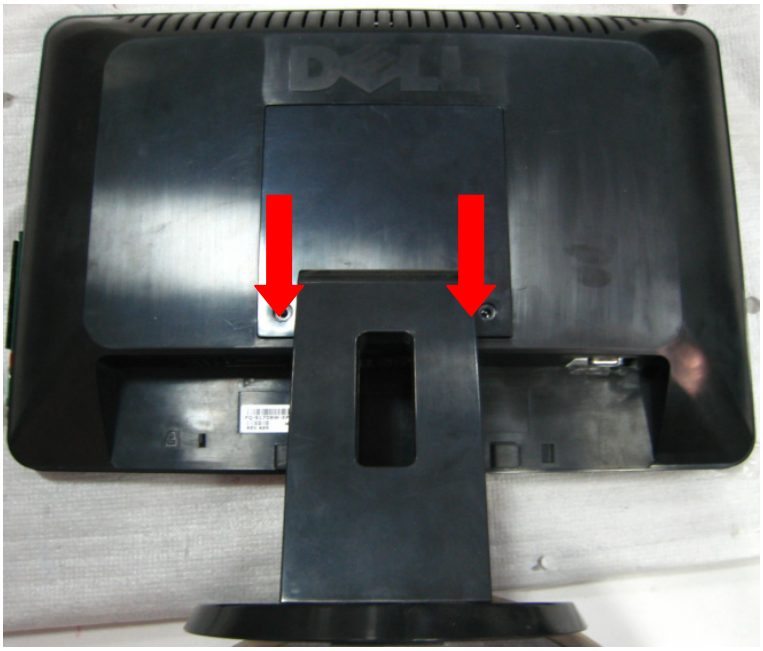
5.2.2 Inverter and Power Board

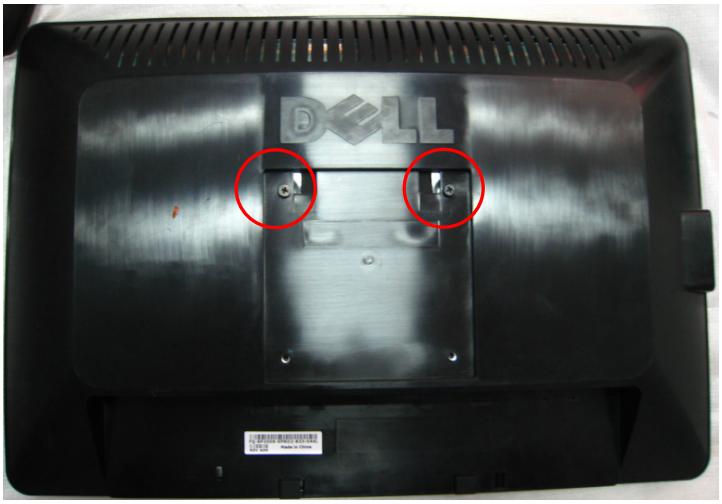


6. Mechanical Instruction

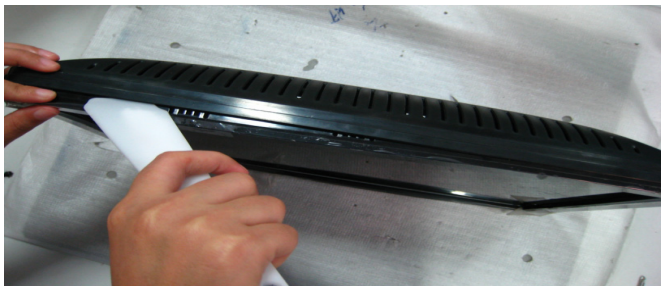
Tools: 2 Power screwdrivers（φ=5mm、L=60mm）; 1 small cross screwdriver; turnbuckle driver;

Setting: Power screwdriver torque A=11 kgF. Cm; torque B=6 kgF. Cm

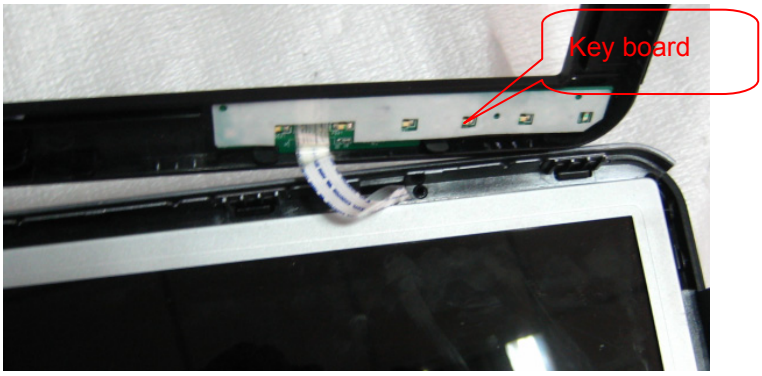
Fig	Remark
	**Remove stand：** Remove the two screws and remove the stand by Torque A.
	1. Pull out the hinge cover follow the arrowhead direction and remove it, then remove the hinge.

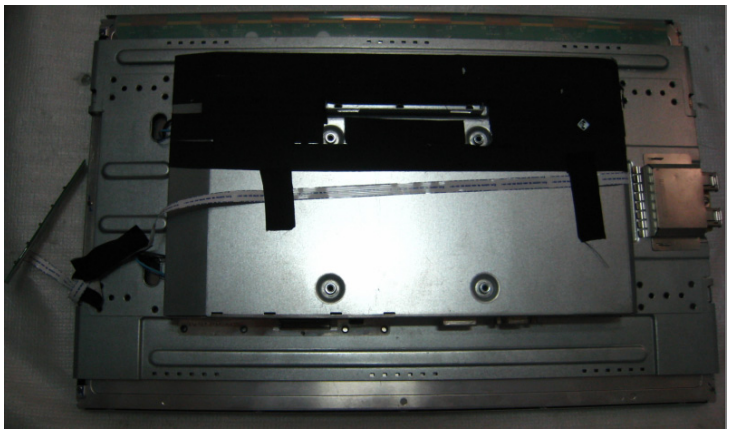


2. Remove the two screws and remove the base by Torque A.

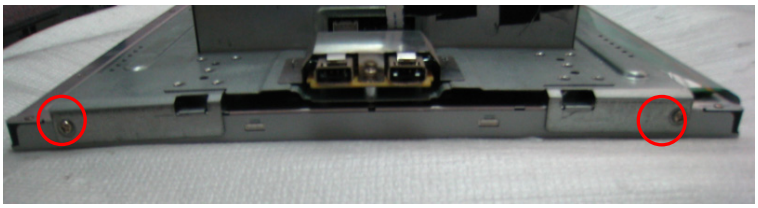
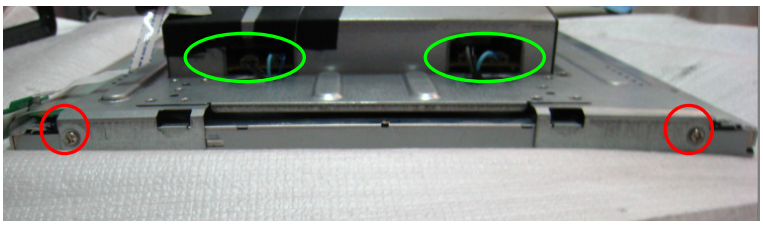
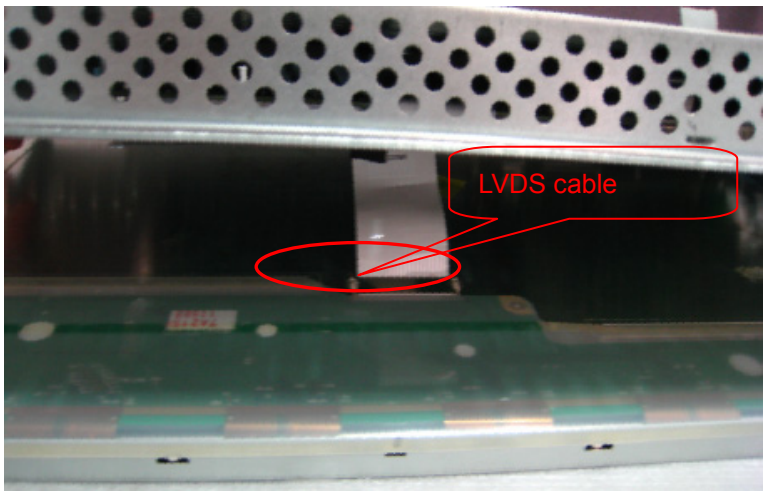


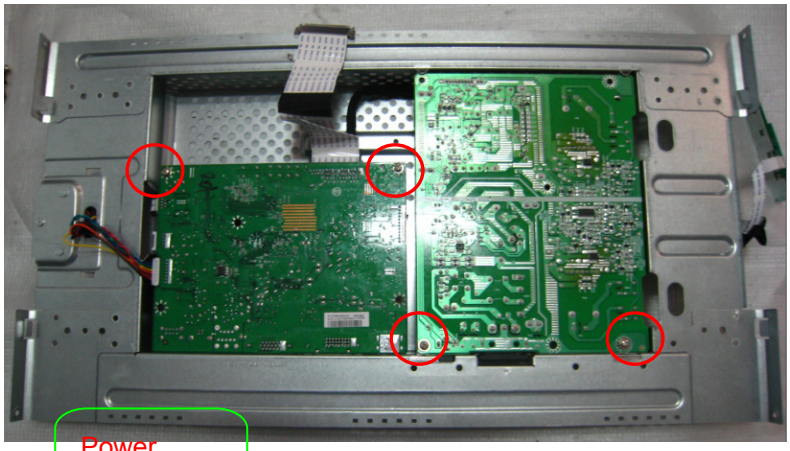
Remove the rear cover: Pry the monitor up then find out the hooks' position, use the tool (like the picture or other card) to insert into the gap of bezel and rear cover, then turn over the monitor and take off the rear cover.





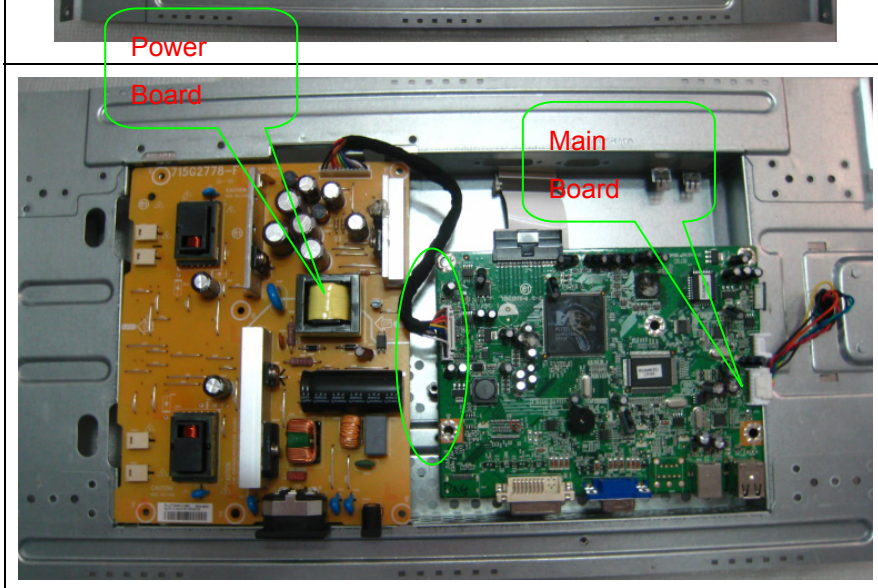
Remove shield: Remove the screw and remove the small cover shield.

	Remove shield: Remove the screws by Torque B or by manual and then remove the shield.
 	Remove the screws remarked in red and disconnect connector remarked in green. Remove the screws and remove the main frame by manual or torque = 3kgF.Cm.
	Install: Note: Make LVDS connector's metal side adown



Remove the Power Board, Main Board:

Remove the screws by torque B



Disconnect connector remarked in green to remove the Power Board, Main Board.

Install:

the cable doesn't touch the capacitances and don't be laid above the capacitances.

Panel

Symbol	TPV Part Number	Description
10	CBPC8CMUDLQ1	Main Board
11	PWPC8A42CQA1	PWPC Board
12	095G 82012D507	WIRE HARNESS
13	750GLCA1WAA33Z000D	Panel(CPT)

Camera & Microphone test sop

Preparation: open PC, Double click SP2009Cameratest

and adsrecorder

Step:1.connect monitor USB ports bring up in Fig.1 and PC USB ports with USB cable

Fig 1

Step2:when appear picture in test window on screen, observe the picture ,if the picture appearance as shown Fig 2 ,it means NG, otherwise means Ok.

Fig.2

Step3: when finish testing, press enter key or space key, the picture disappear. The monitor enter pending request.

Step4: Open AD Sound Recorder window to observe sound input wave, the wave as shown Fig 3, that means OK.

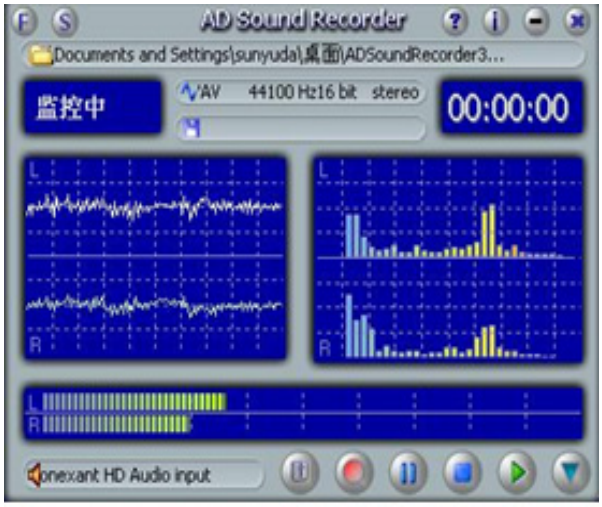


Fig.3

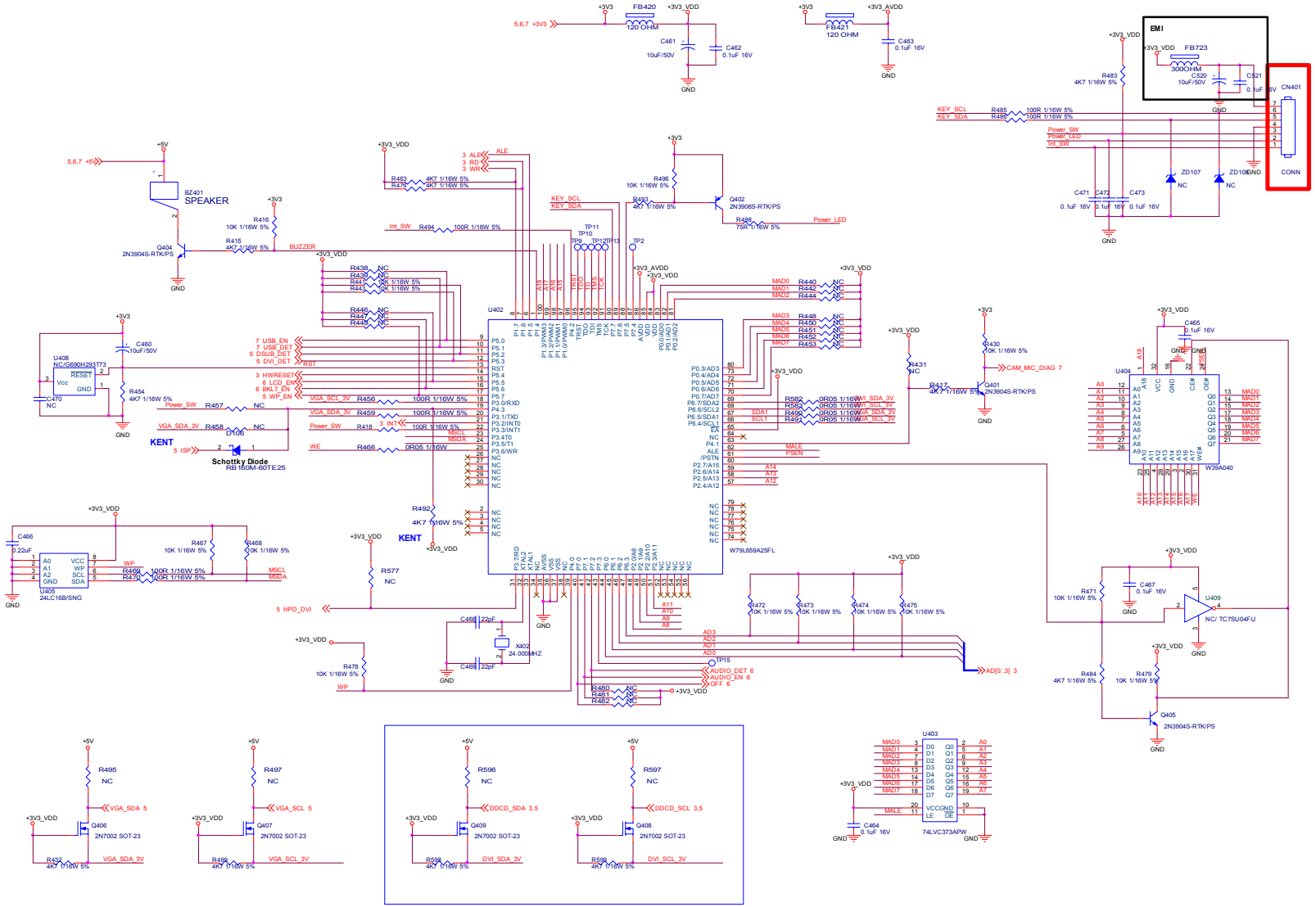
Step4: Disconnect the USB cable.

Notices: 1.install the driver software before test PC USB ports

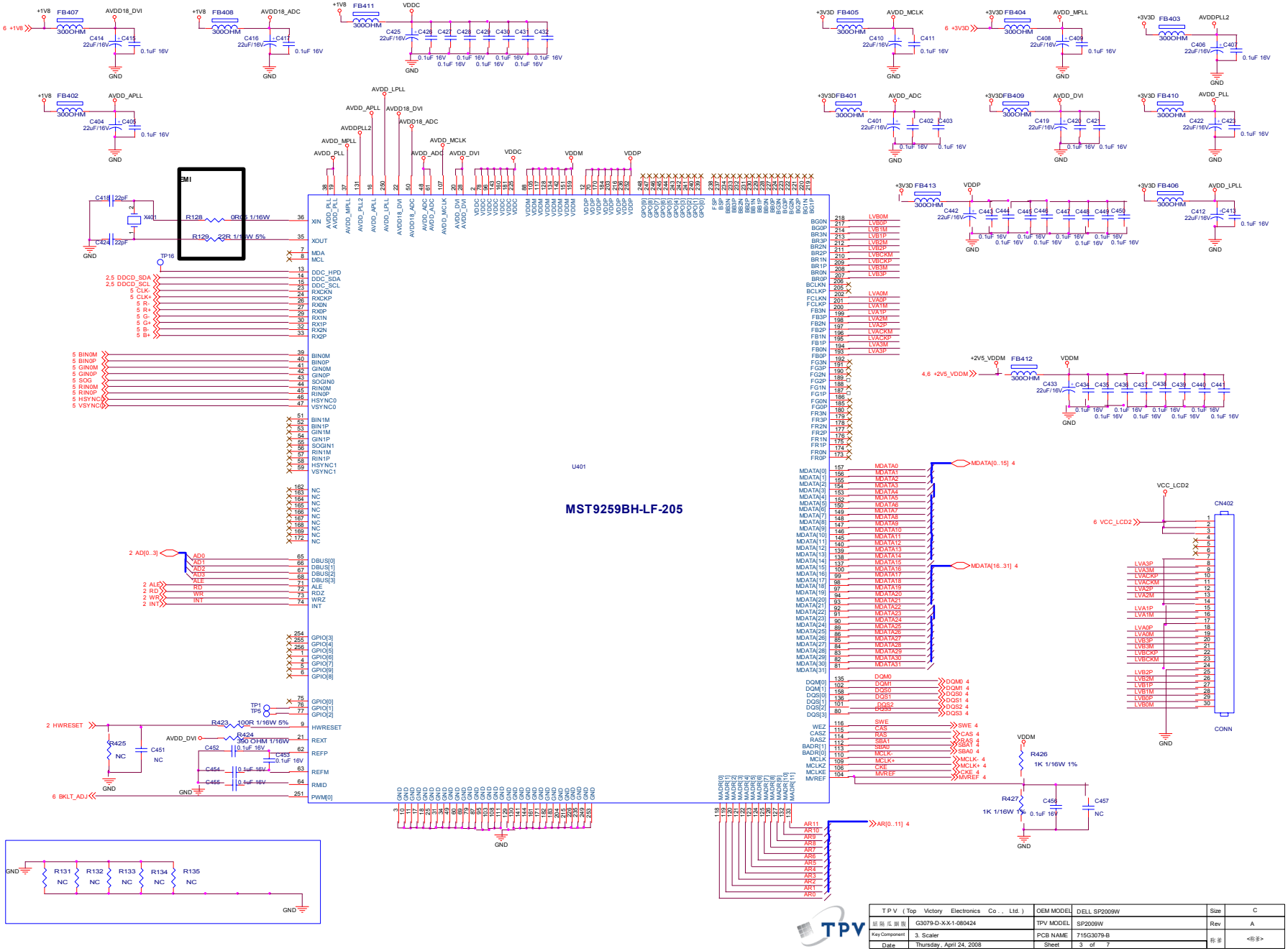
2. Don't touch the camera.

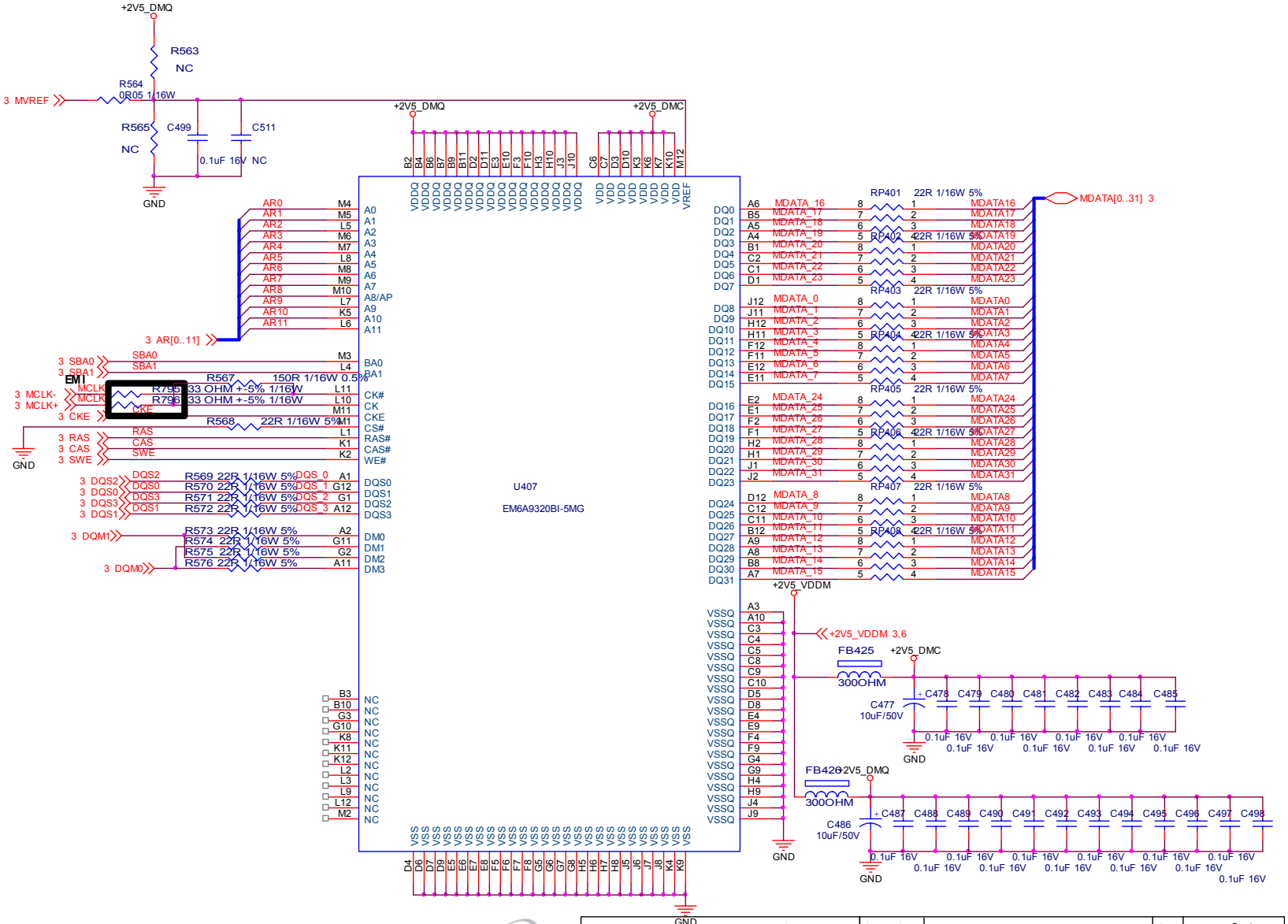
7. Schematic Diagram

7.1 Main Board

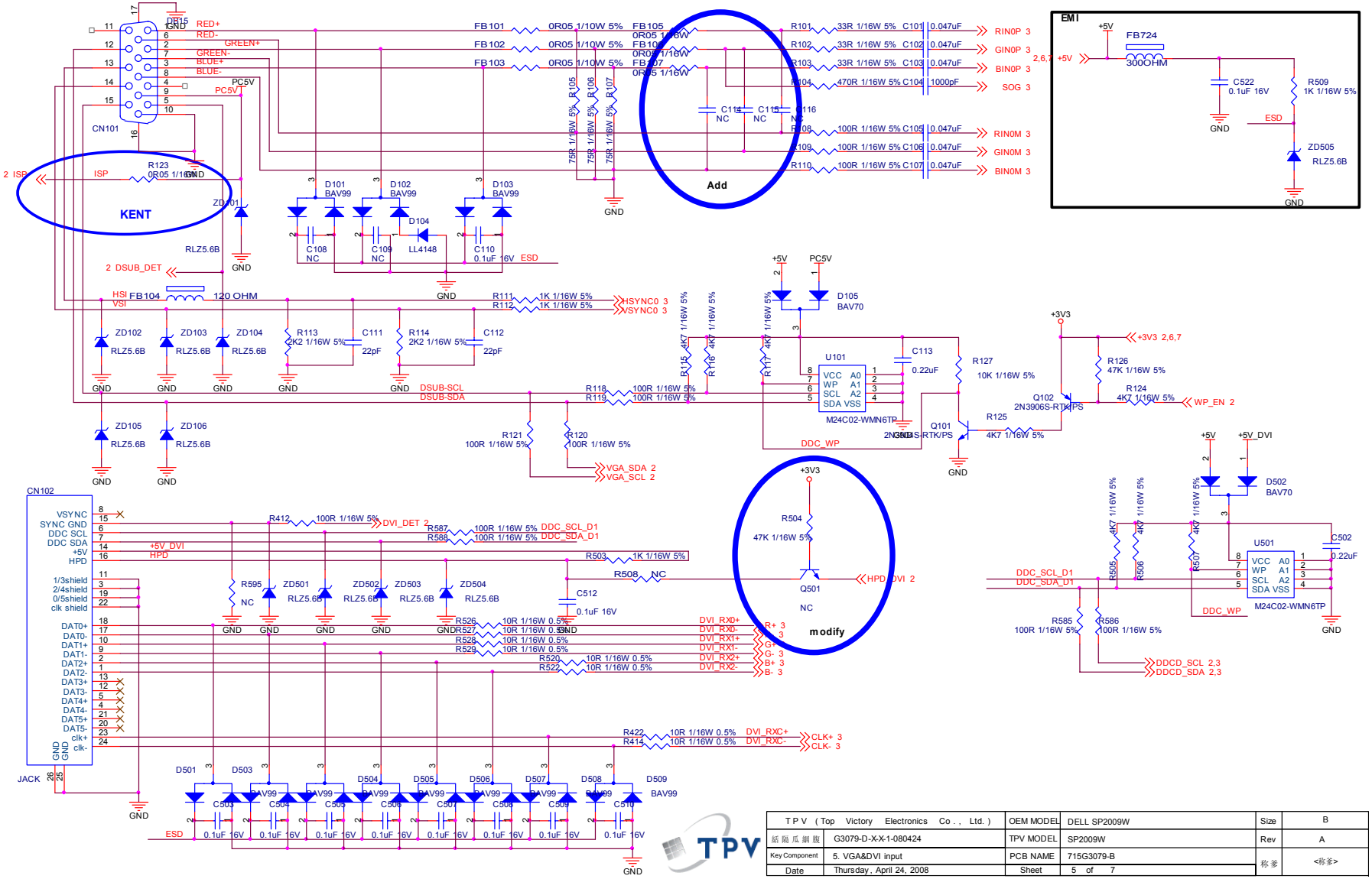


TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL: DELL SP2009W	Size	C
版 版 本 號	TPV MODEL: SP2009W	Rev	A
Key Component	PCB NAME: 715G3079-C	版 本	<版本>
Date: Thursday, April 24, 2008	Sheet: 2 of 7		

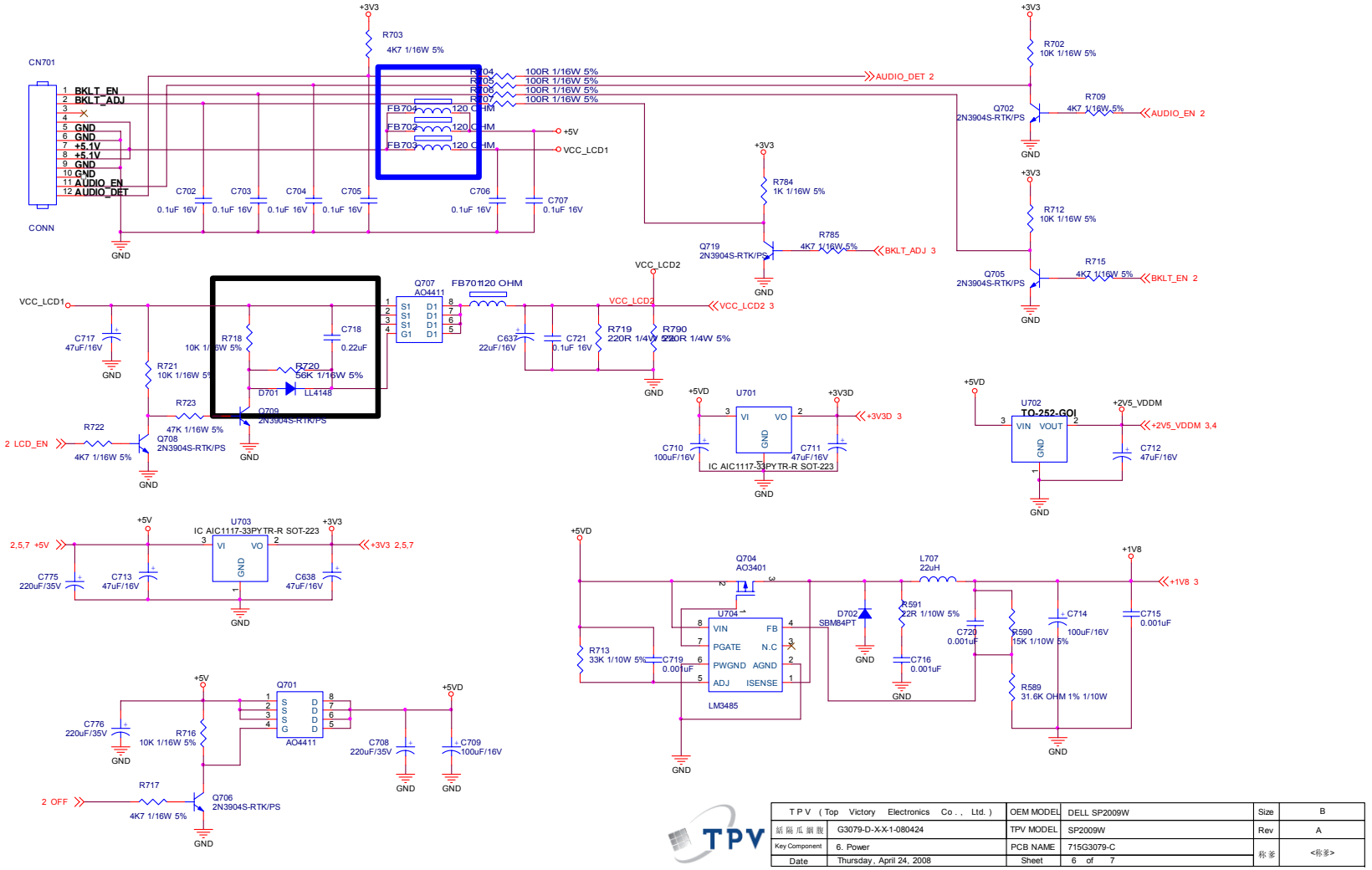

U401
MST9259BH-LF-205
EMI
X401
R128 0R/0.1/16W
R129 22R 1/16W 5%
C418 22pF
C424 22pF
TP16
FB407 300OHM
FB408 300OHM
FB411 300OHM
FB405 300OHM
FB404 300OHM
FB403 300OHM
FB402 300OHM
FB401 300OHM
FB409 300OHM
FB410 300OHM
FB413 300OHM
FB406 300OHM
FB412 300OHM
AVDD18_DVI
AVDD18_ADC
AVDD_APLL
AVDD_LPLL
AVDDPLL2
AVDD_MPLL
AVDD_PLL
AVDD_MCLK
AVDD_ADC
AVDD_DVI
AVDD_MPLL
VDDC
VDDM
VDDP
VCC_LCD2
CN402
CONN
R423 100R 1/16W 5%
R424 350 OHM 1/16W
R425 NC
R426 1K 1/16W 1%
R427 1K 1/16W 1%
R131 NC
R132 NC
R133 NC
R134 NC
R135 NC
HWRESET
REXT
REFP
REFM
RMID
PWM[0]
BKLT_ADJ
MDATA[0..15]
MDATA[16..31]
AR[0..11]
DQM0
DQM1
DQS0
DQS1
DQS2
DQS3
SWE
CAS
RAS
SBA1
SBA0
MCLK-
MCLK+
CKE
MVREF
XIN
XOUT
MDA
MCL
DDC_HPD
DDC_SDA
DDC_SCL
RXCKN
RXCKP
RXON
RXOP
RX1N
RX1P
RX2N
RX2P
BIN0M
BIN0P
GIN0M
GIN0P
SOGIN0
RIN0M
RIN0P
HSYNC0
VSYNC0
BIN1M
BIN1P
GIN1M
GIN1P
SOGIN1
RIN1M
RIN1P
HSYNC1
VSYNC1
AD0
AD1
AD2
AD3
ALE
RD
WR
INT
DBUS[0]
DBUS[1]
DBUS[2]
DBUS[3]
ALE
RDZ
INT
GPIO[3]
GPIO[4]
GPIO[5]
GPIO[6]
GPIO[7]
GPIO[9]
GPIO[8]
GPIO[0]
GPIO[1]
GPIO[2]
LVB0M
LVB0P
LVB1M
LVB1P
LVB2M
LVB2P
LVBCKM
LVBCKP
LVB3M
LVB3P
LVA0M
LVA0P
LVA1M
LVA1P
LVA2M
LVA2P
LVACKM
LVACKP
LVA3M
LVA3P
TPV
OEM MODEL DELL SP2009W
TPV MODEL SP2009W
PCB NAME 715G3079-B
Size C
Rev A
Date Thursday, April 24, 2008
Sheet 3 of 7



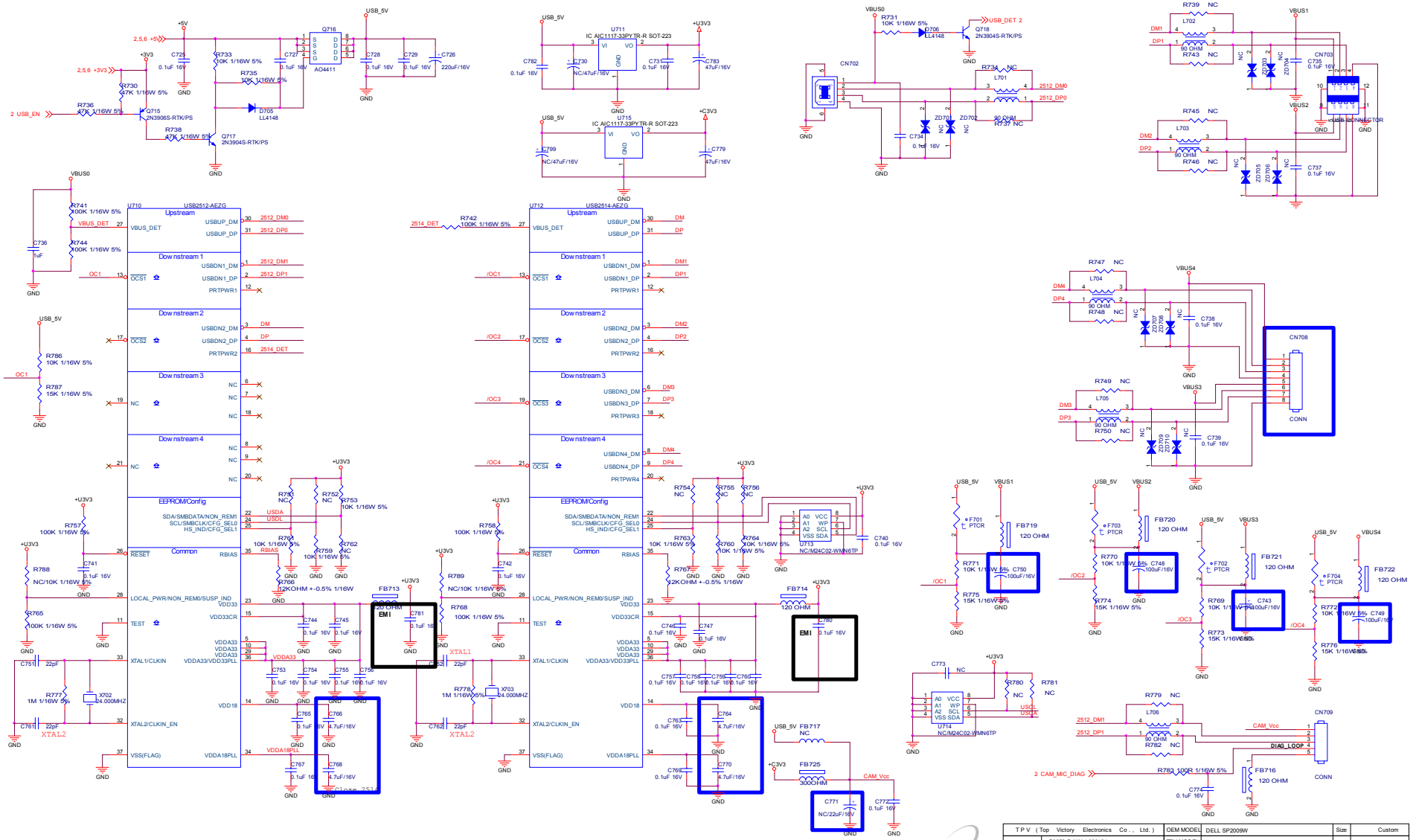
T P V (Top Victory Electronics Co., Ltd.)		OEM MODEL	DELL SP2009W	Size	Custom
結 隔 瓜 銅 馥	G3079-D-X-X-1-080424	TPV MODEL	SP2009W	Rev	A
Key Component	4. SDRAM	PCB NAME	715G3079-B	称 爹	<称爹>
Date	Thursday, April 24, 2008	Sheet	4 of 7		



T P V (Top Victory Electronics Co . , Ltd.)		OEM MODEL	DELL SP2009W	Size	B
廷陽瓜鋼股	G3079-D-X-X-1-080424	TPV MODEL	SP2009W	Rev	A
Key Component	5. VGA&DVI input	PCB NAME	715G3079-B	称爹	<称爹>
Date	Thursday, April 24, 2008	Sheet	5 of 7		



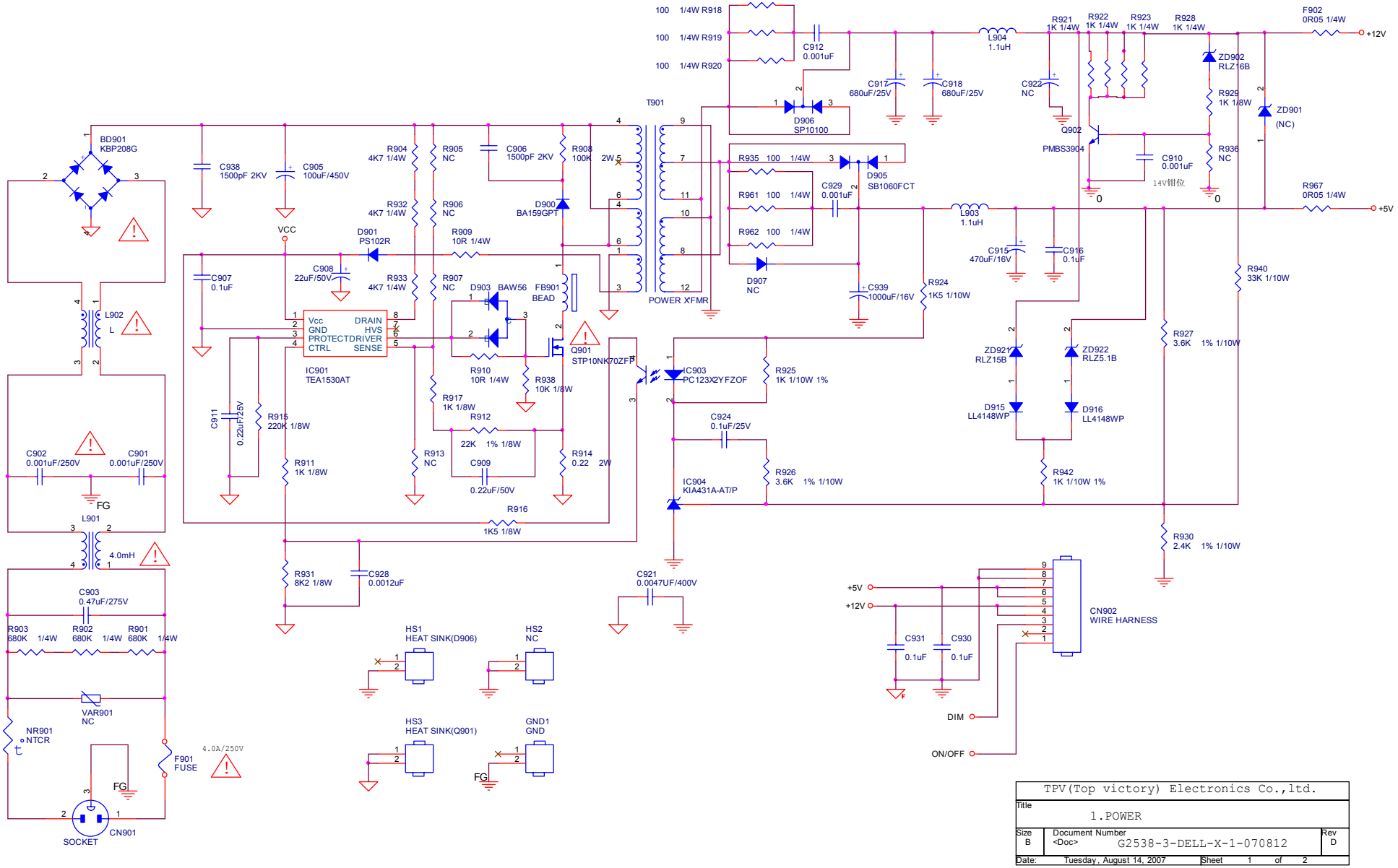
TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL	DELL SP2009W	Size	B
結構件號碼	G3079-D-X-X-1-080424	TPV MODEL	SP2009W	Rev	A
Key Component	6. Power	PCB NAME	715G3079-C	稱爹	<稱爹>
Date	Thursday, April 24, 2008	Sheet	6 of 7		

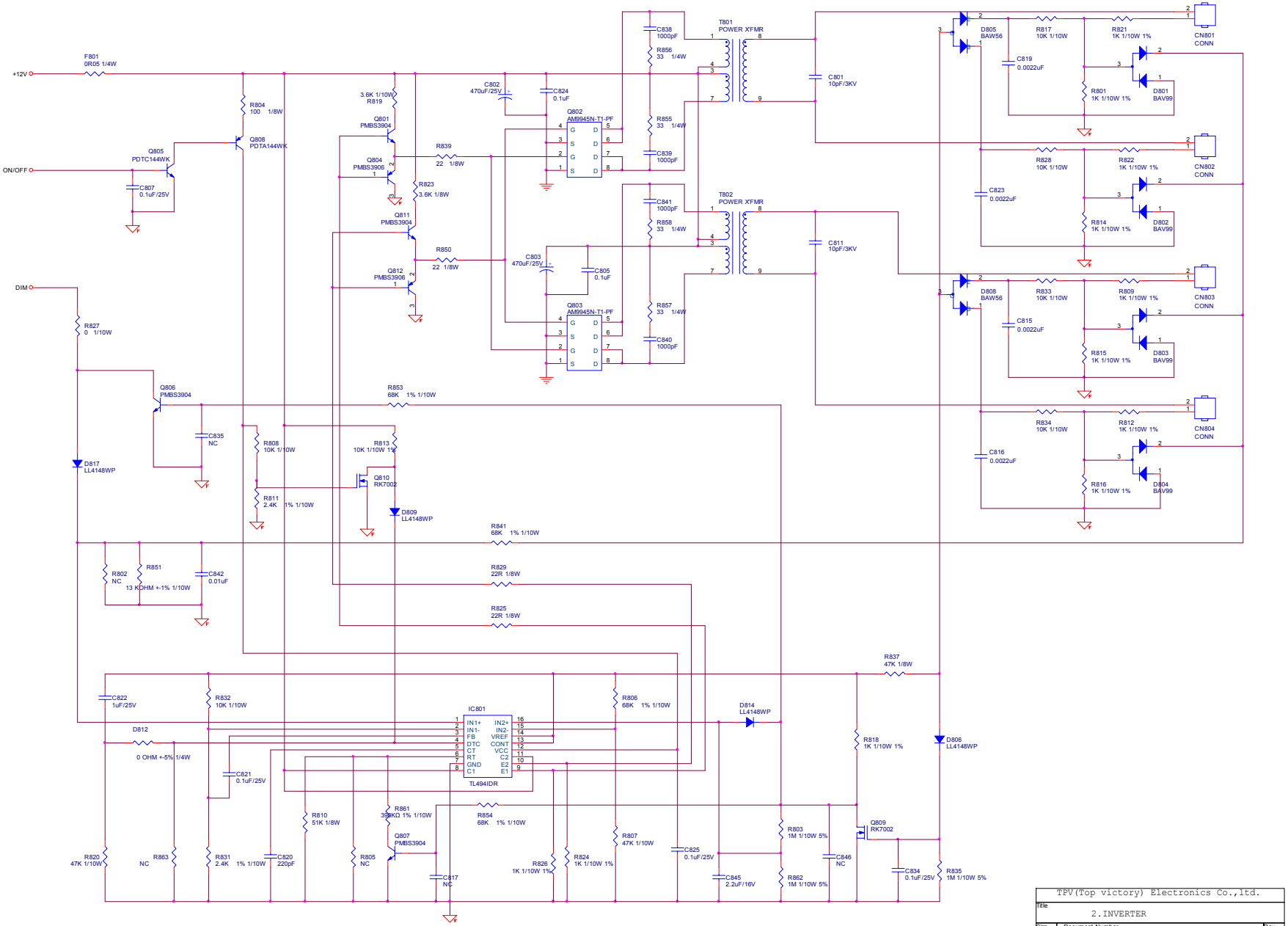


P.S. GND, UGND must be connected.

T P V (Top Victory Electronics Co., Ltd.)	OEM MODEL	DELL SP2009W	Size: Custom
G3079-D-X-X-1-080424	TPV MODEL	SP2009W	Rev: A
Key Component: 9. USB and CAM/MIC output	PCB NAME	715G3079-B	
Date: Thursday, April 24, 2008	Sheet	7 of 7	

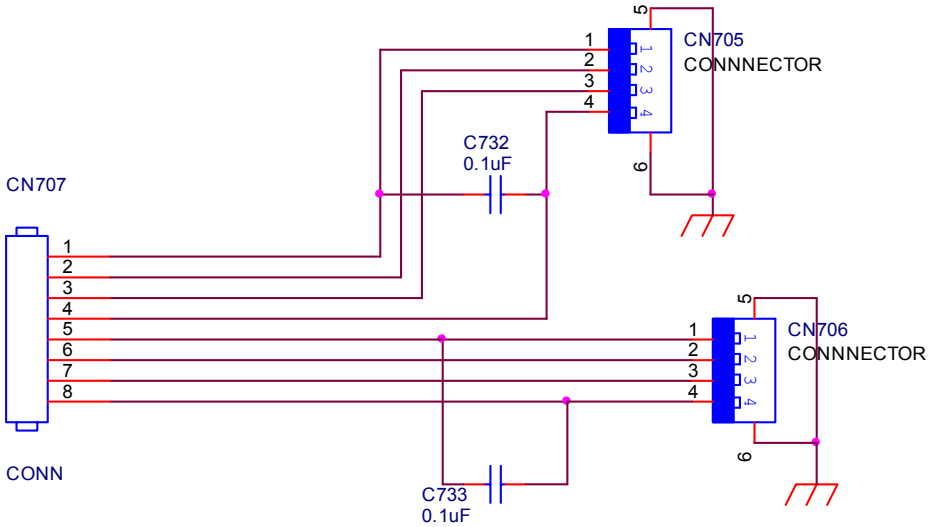
7.2 Power Board





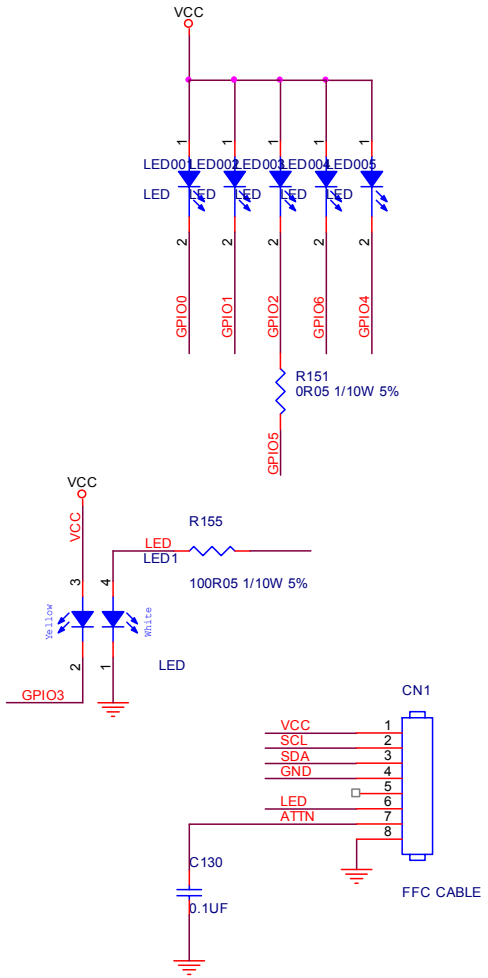
TPV(Top victory) Electronics Co.,ltd.		
Title: 2.INVERTER		
Size: CustomDoc>	Document Number: G2538-3-DELL-X-1-070812	Rev: D
Date: Tuesday, August 14, 2007	Sheet 1 of 2	

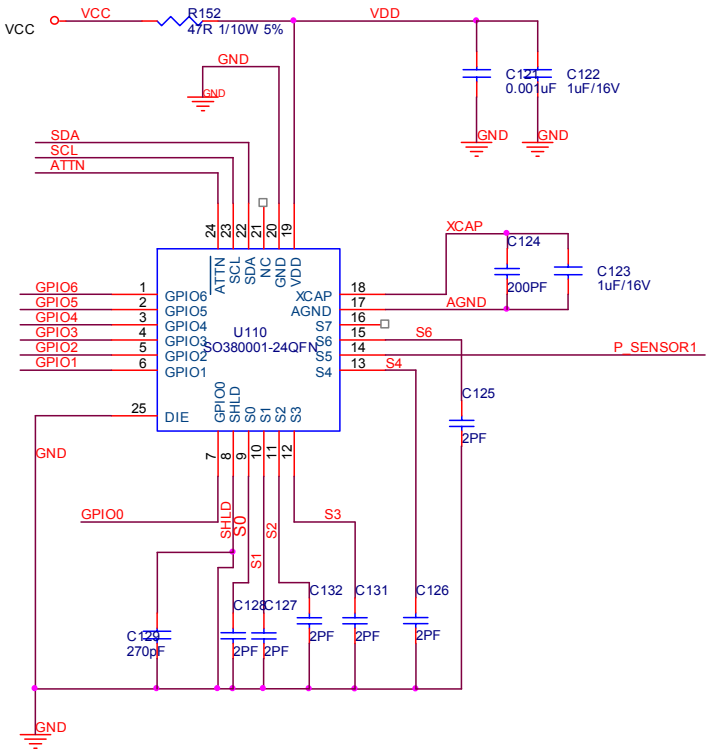
7.3 USB Board

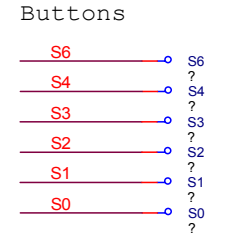


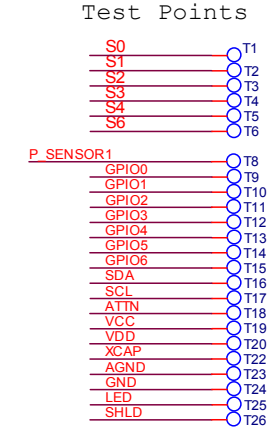
T P V （Top Victory Electronics Co . , Ltd. ）		OEM MODEL	DELL SP2009W	Size	A
結 隔 瓜 網 腹	G2727-D-X-X-1-080421	TPV MODEL	SP2009W	Rev	A
Key Component	1. USB	PCB NAME	715G2727-C	称爹	<称爹>
Date	Monday , April 21, 2008	Sheet	1 of 9		

7.4 Key Board









CN1 腹ゼ）， ъ侶 symbol

篆讐SYMBOLゼ ミ

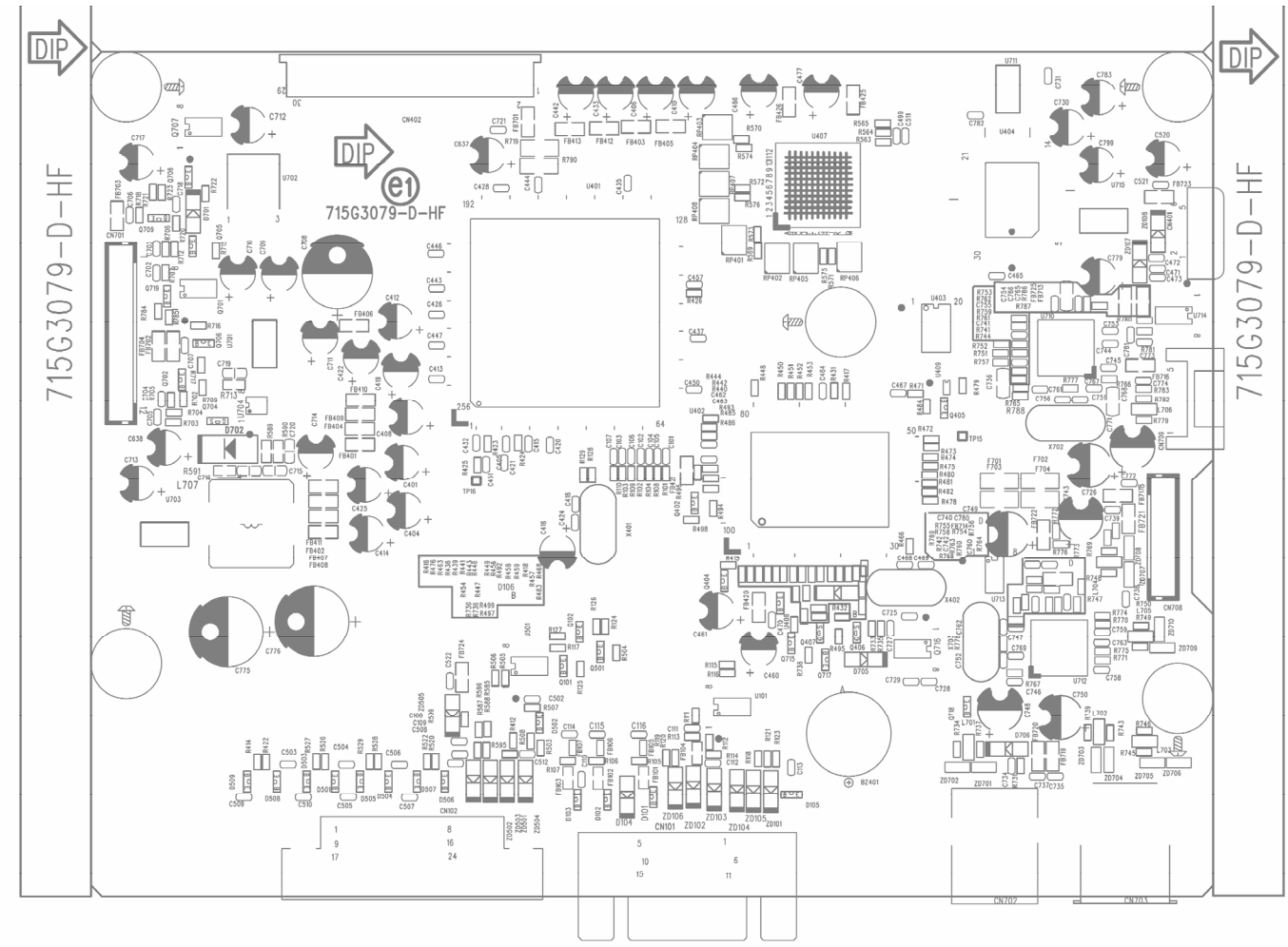
2PF : 65G0603209 21

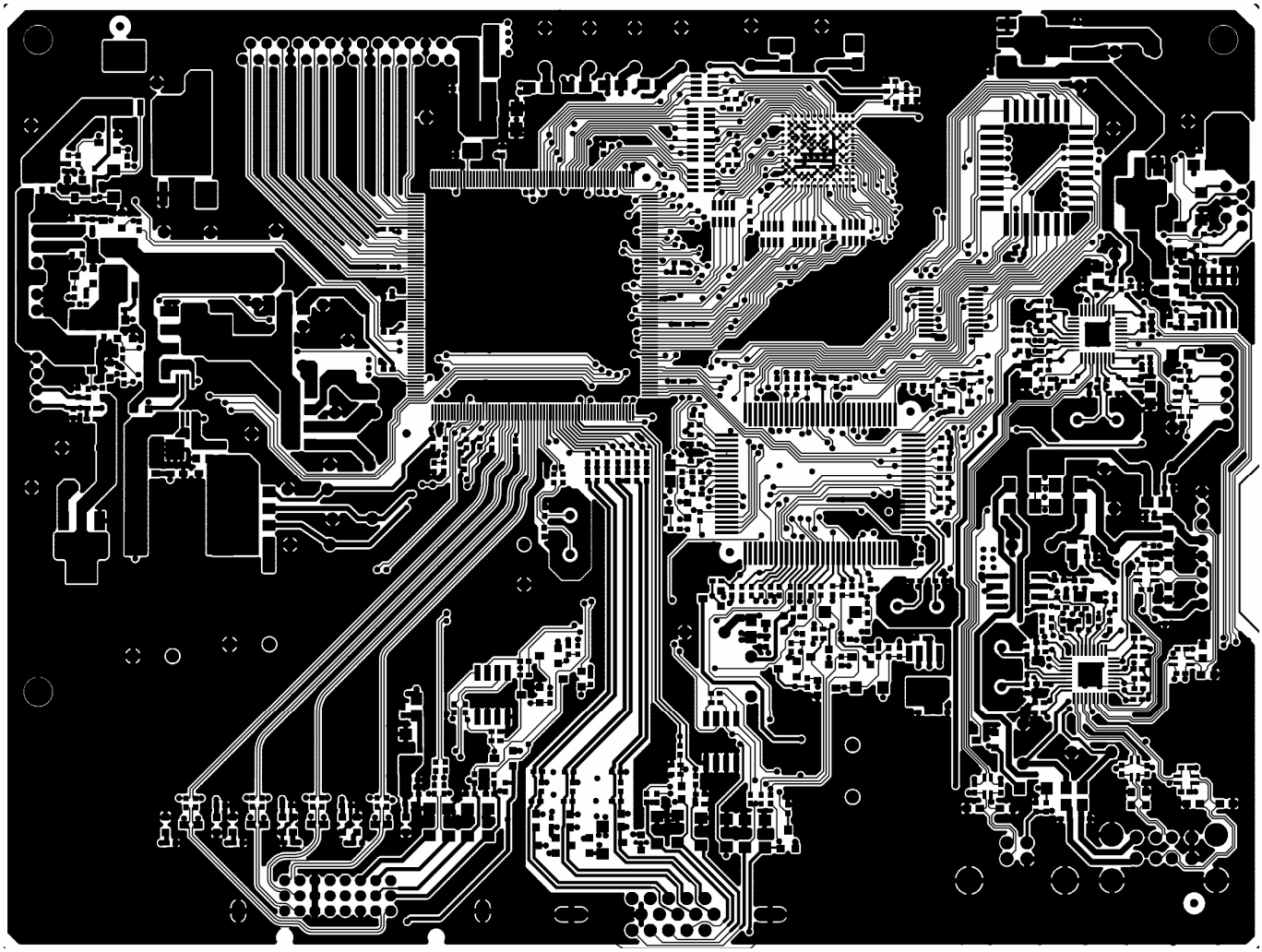
200PF : 65G0603201 31

T P V （Top Victory Electronics Co., Ltd.）		OEM MODEL	DELL SP2009W	Size	Custom
紙 隔 瓜 網 腹	G3096-C-HF-X-1-080324	TPV MODEL	SP2009W	Rev	A
Key Component	2. CTRL BD	PCB NAME	715G3096-B	称爹	<称爹>
Date	Monday, March 24, 2008	Sheet	1 of 9		

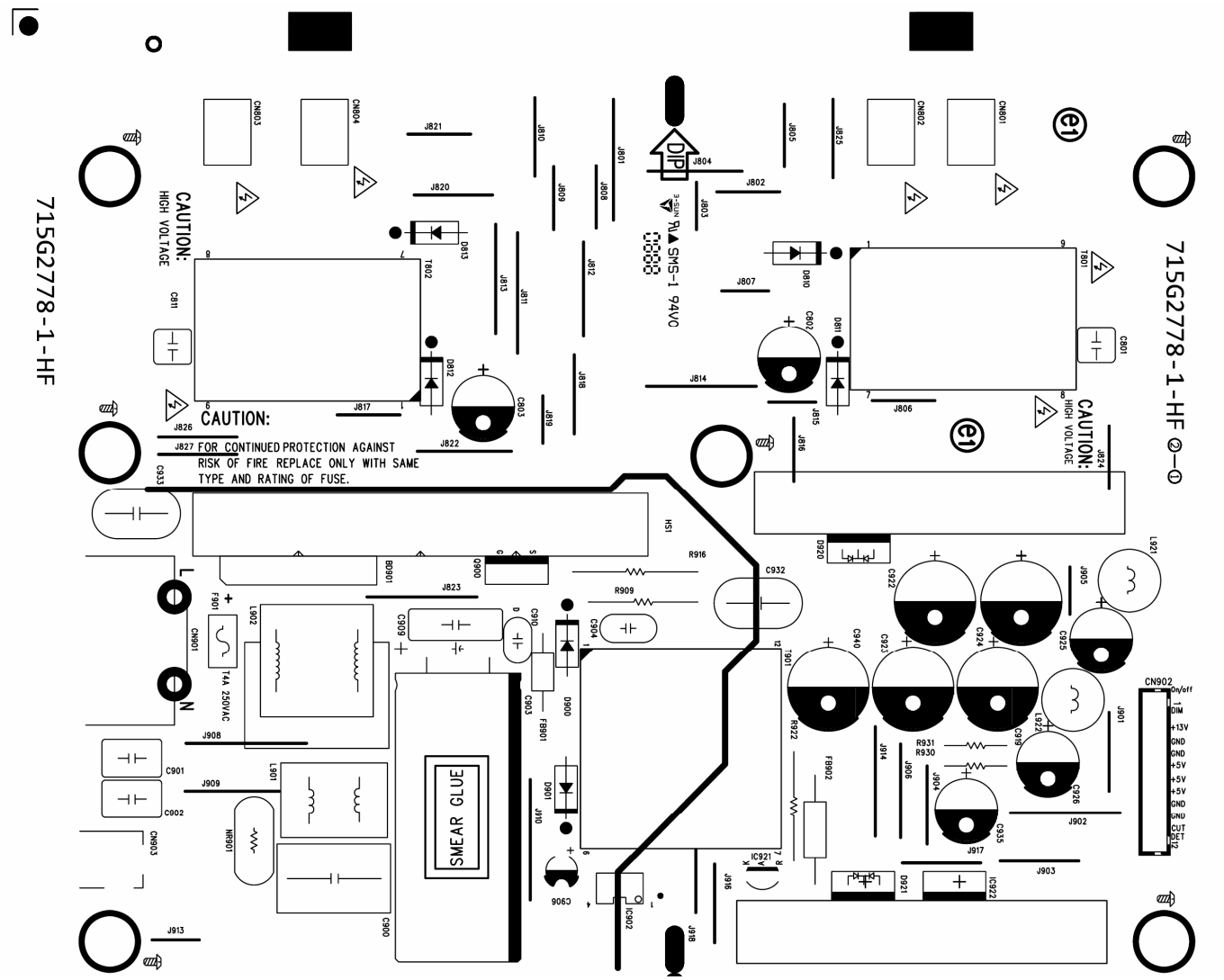
8. PCB Layout

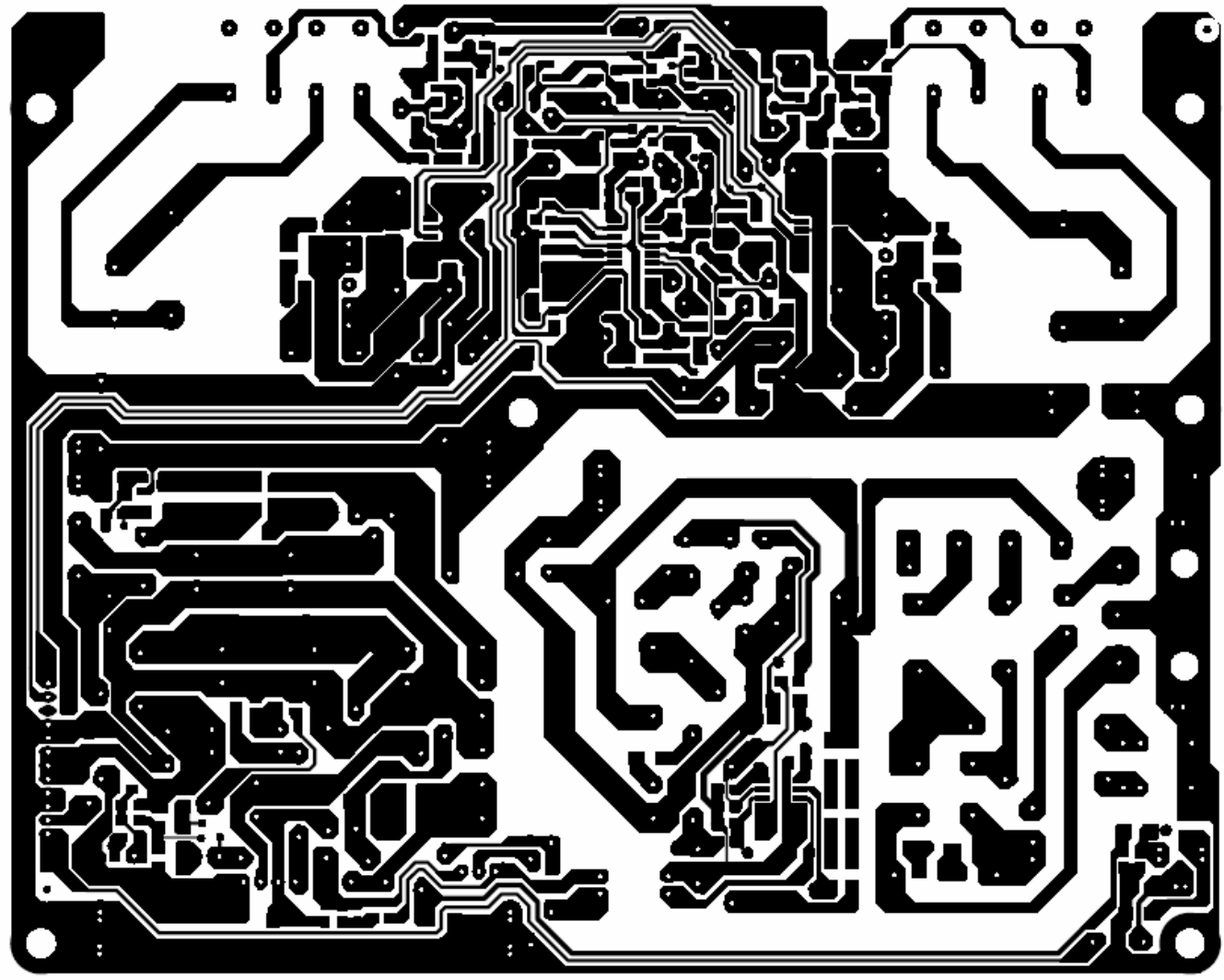
8.1 Main Board



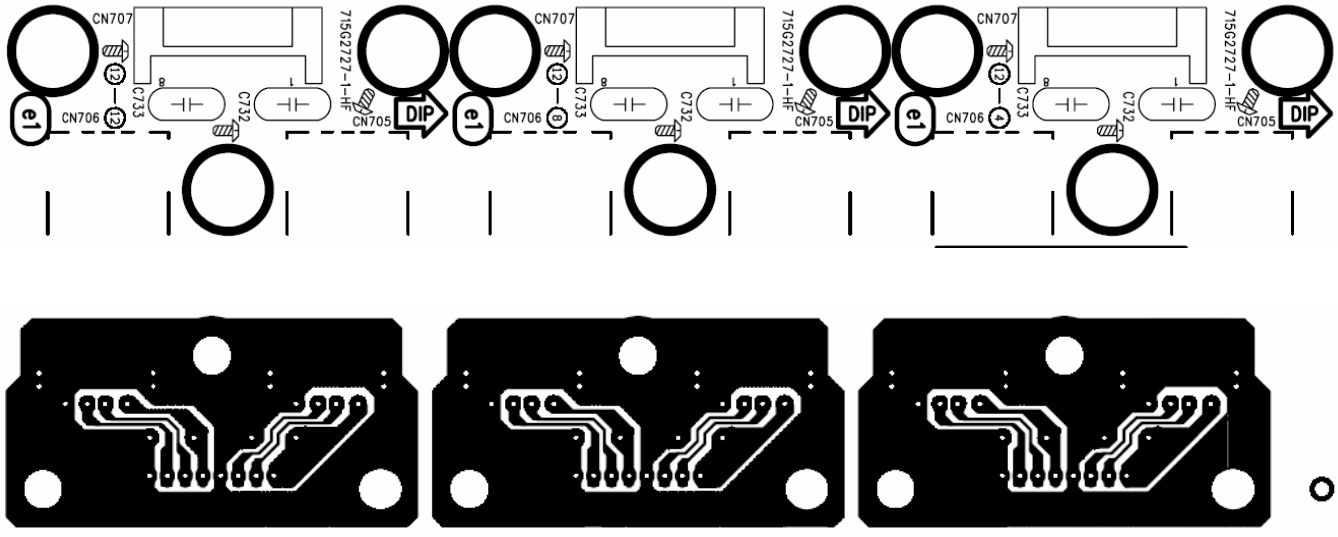


8.2 Power Board





8.3 USB Board



9. Maintainability

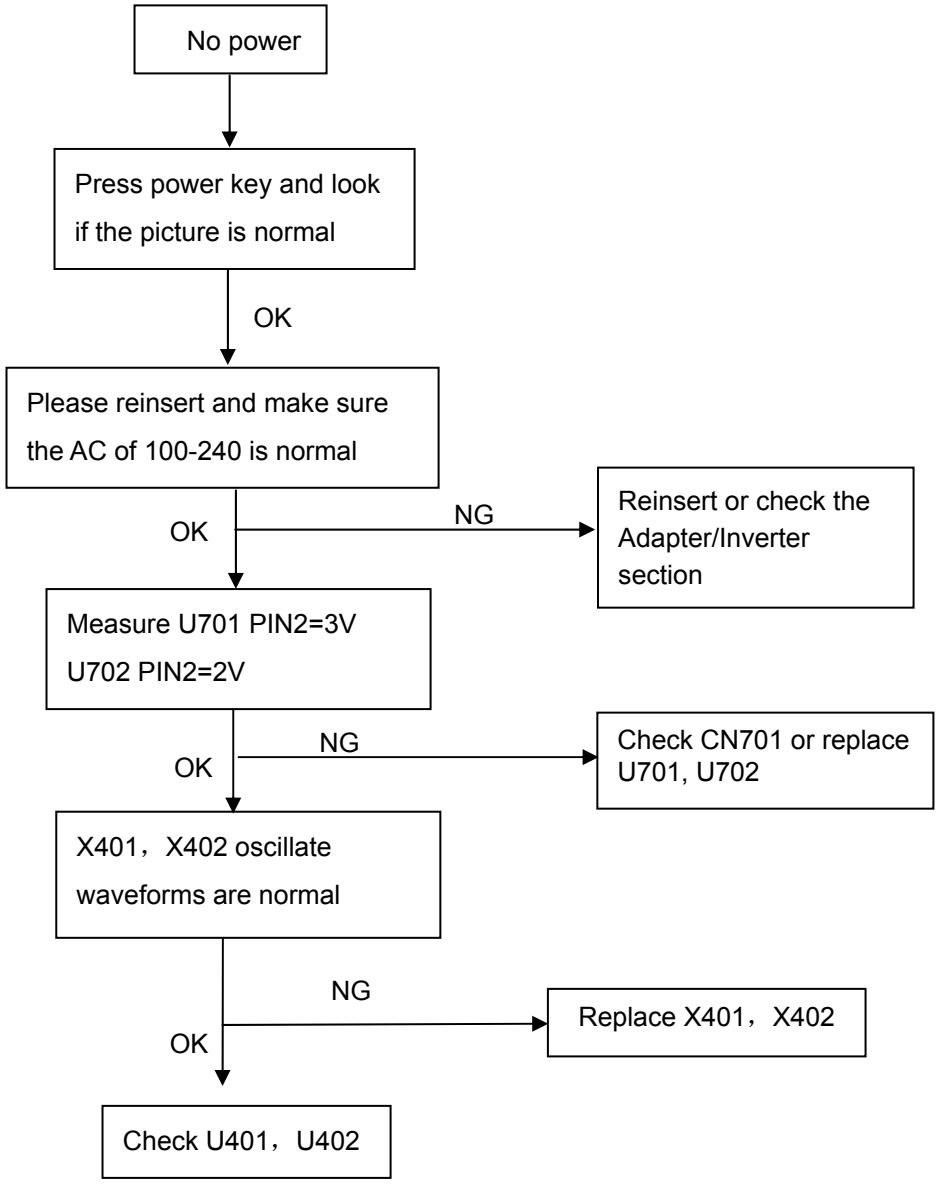
9.1 Equipments and Tools Requirement

1. Voltage meter
2. Oscilloscope
3. Pattern Generator
4. LCD Color Analyzer
5. Service Manual
6. User Manual

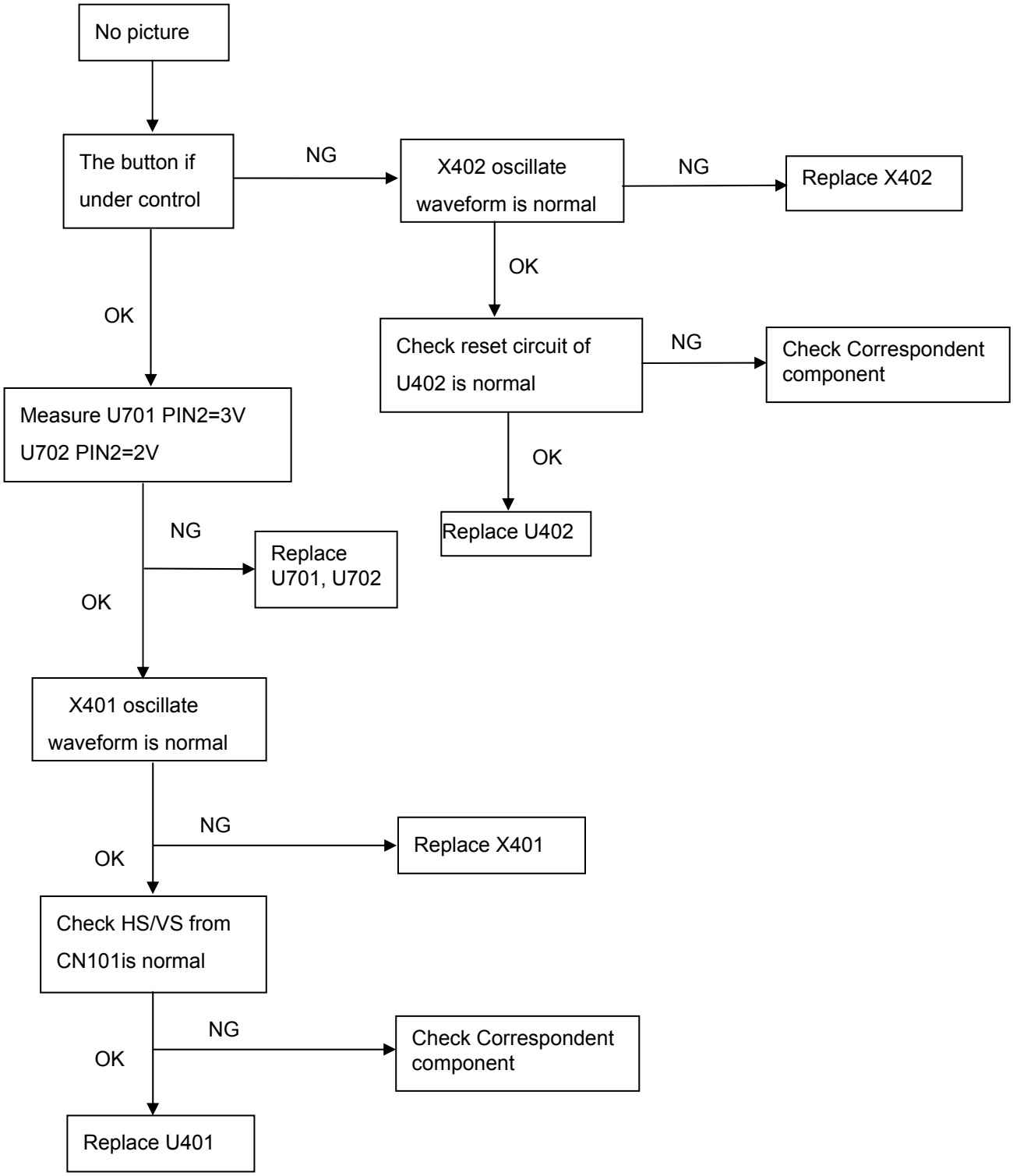
9.2 Trouble shooting

9.2.1 Main Board

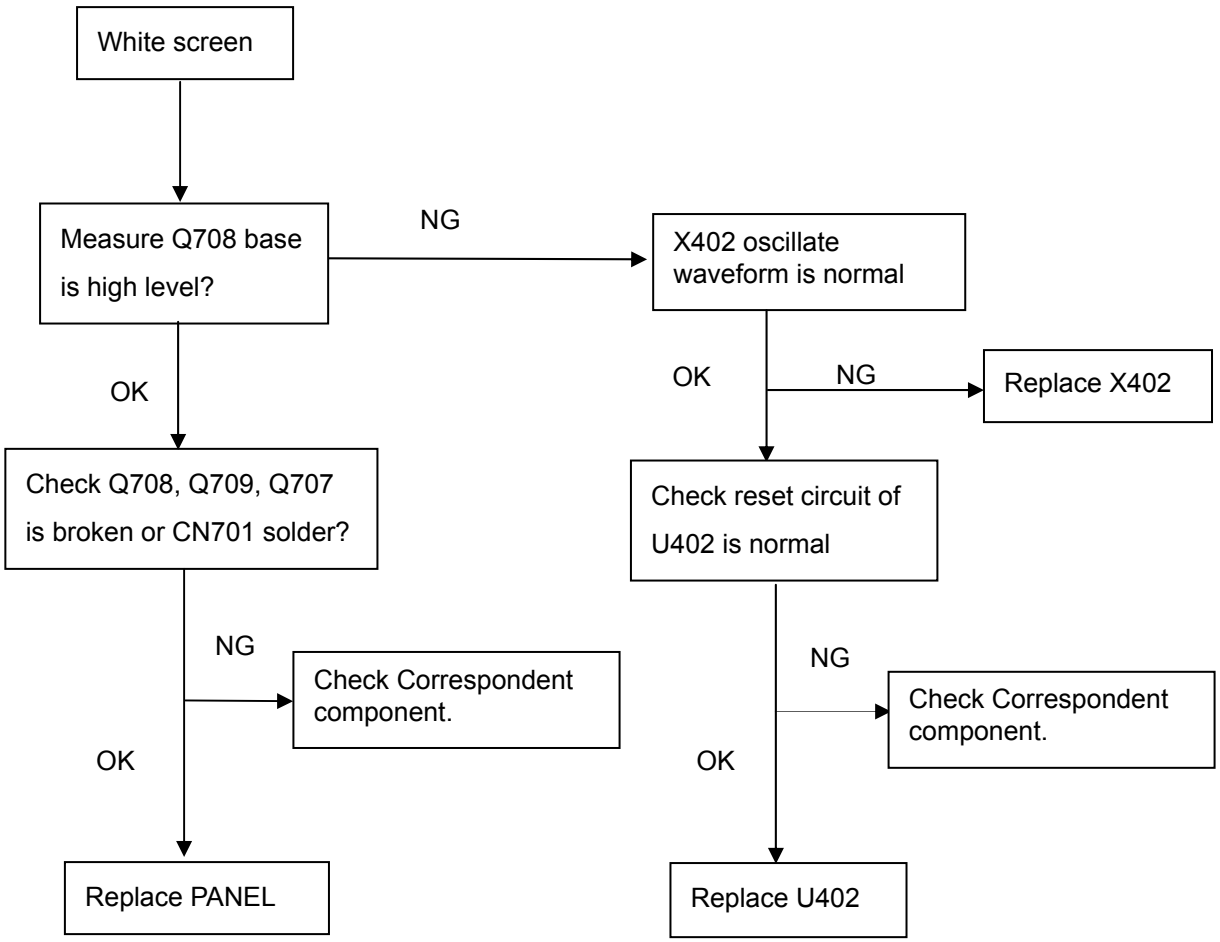
No power



No picture (LED orange)

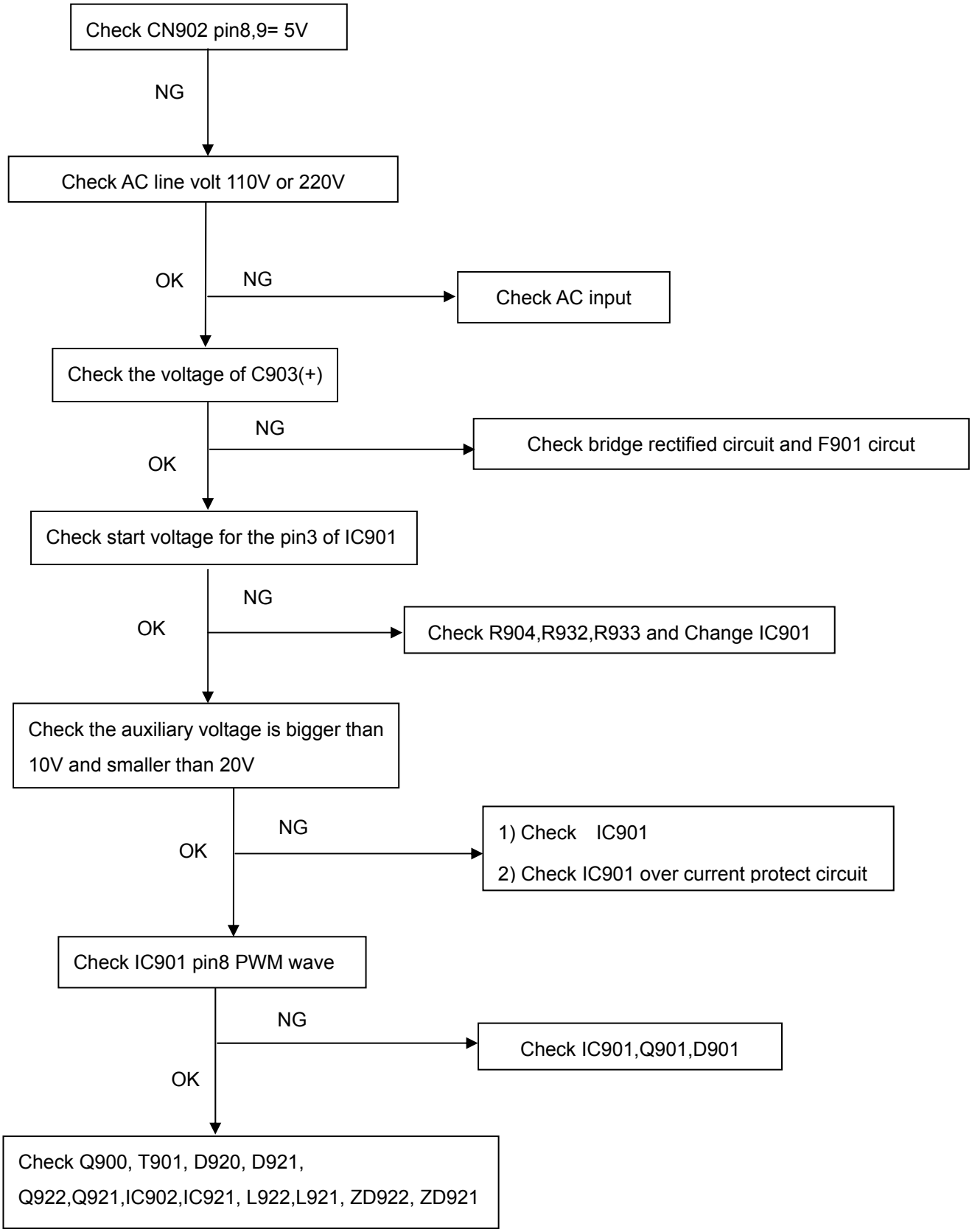


White screen

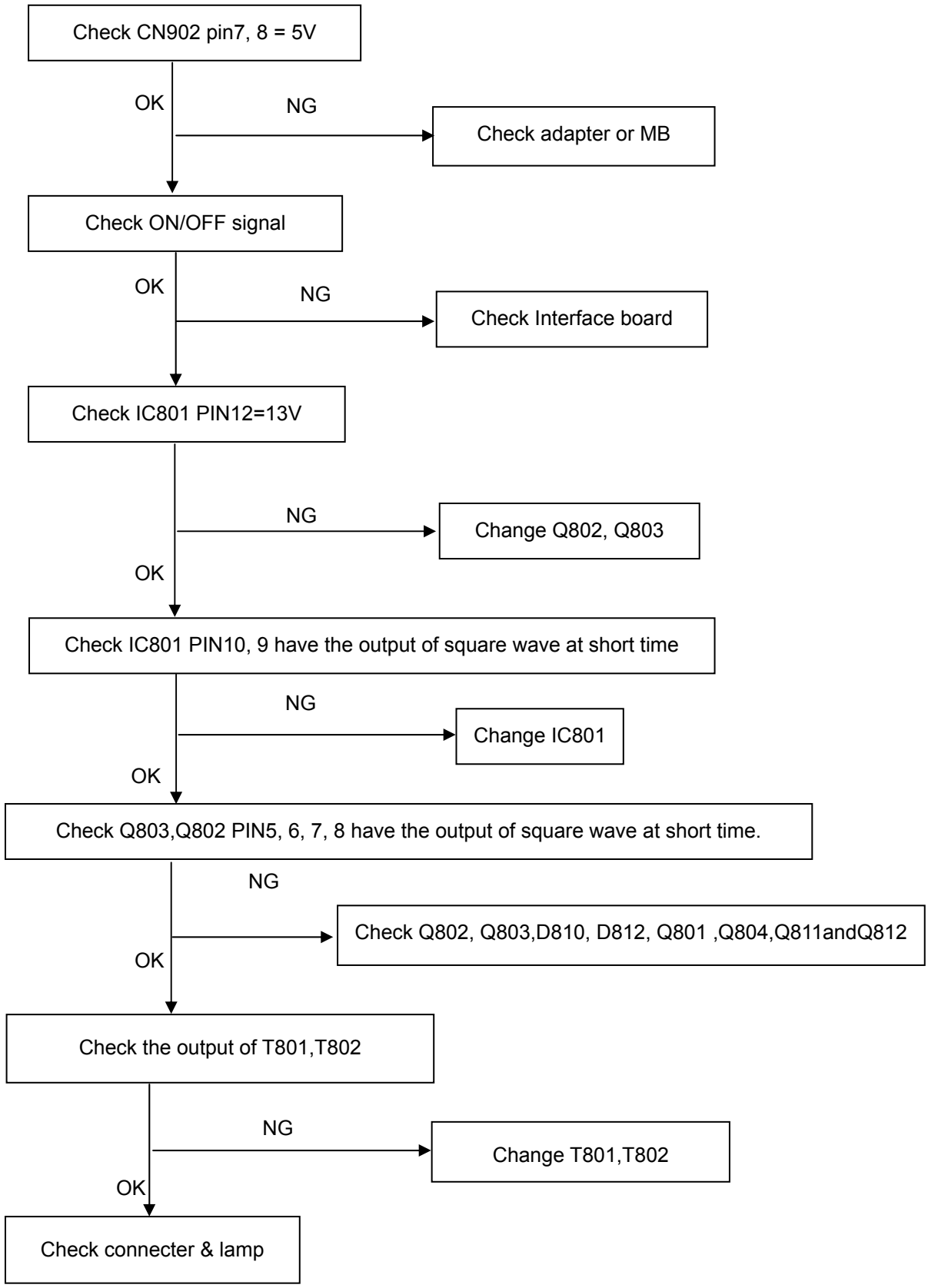


9.2.2 Power/Inverter Board

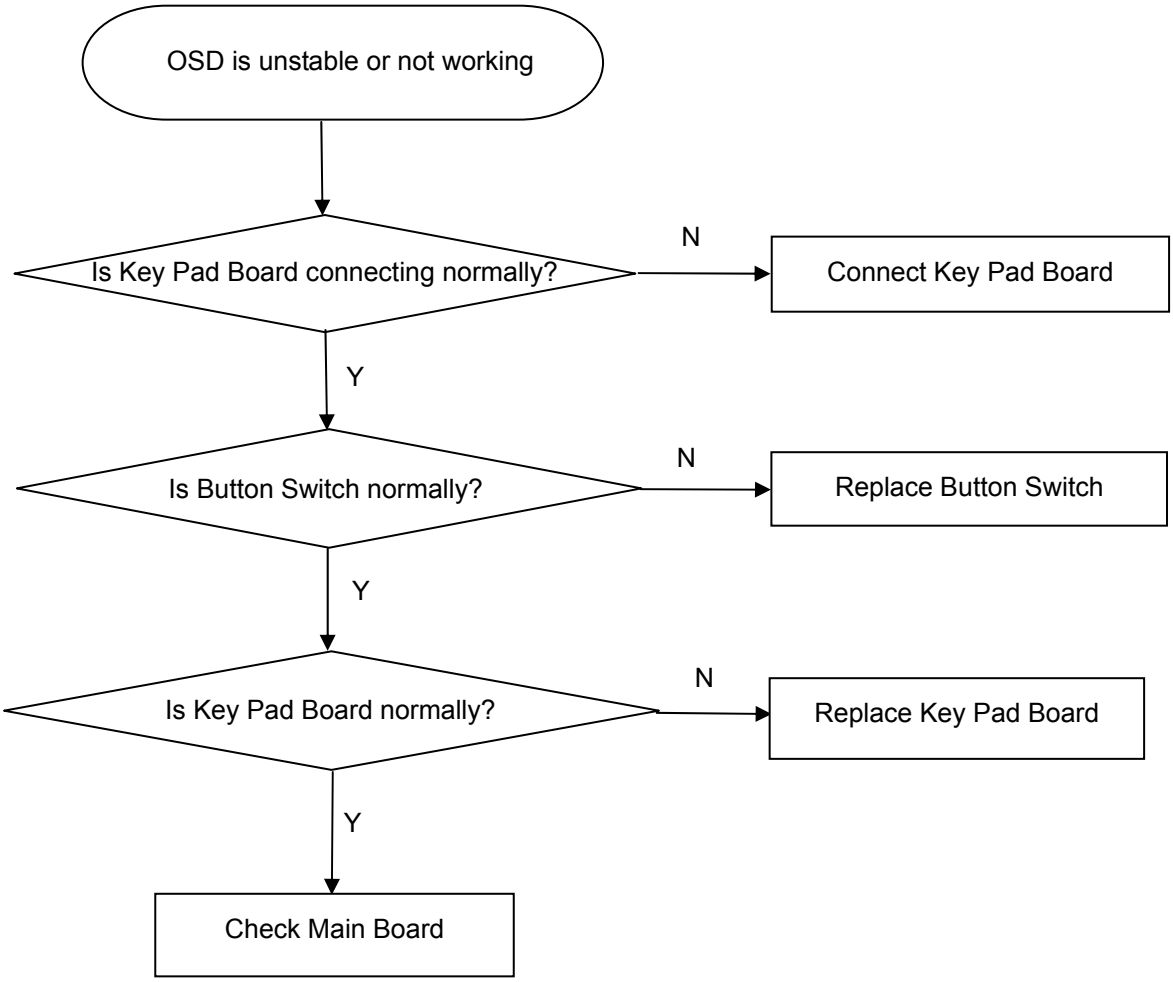
No power



No Backlight



9.2.3 Key Board



10.White balance, Luminance adjustment

Approximately 2 Hours should be allowed for warm up before proceeding White-Balance adjustment.

Before started adjust white balance, please setting the Chroma-7120 **MEM. Channel 3 to 6500^{0}K** colors, **MEM. Channel 4 to 9300^{0}K** colors, **MEM. Channel 9 to 5700^{0}K** (our 9300 parameter is x=283±28, y=297±28, Ymin = 180cd/m^2, 6500 parameter is x =313±28, y=329±28, Ymin= 200cd/m^2, and 5700 parameter is x = 328 ±28, y = 344 ±28, Ymin= 200cd/m^2)

How to setting MEM.channel you can reference to chroma 7120 user guide or simple use " **SC"** key and " **NEXT"** key to modify x, y, Y value and use **"ID"** key to modify the TEXT description Following is the procedure to do white-balance adjust

Enter into the factory mode:

Press MENU and AUTO-ADJUST button during press Power button will activate the factory mode,

Gain adjustment:

Move cursor to "-Factory Setting-" and press MENU key to enter this sub-menu.

Move cursor to " Factory" and press MENU key.

Move cursor to " Auto Level" and press MENU key to adjust Gain and Offset automatically;

a. Adjust sRGB (6500^{0}K) color-temperature

1. Switch the chroma-7120 to **RGB-mode** (with press "MODE" button)
2. Switch the MEM.channel to Channel 3 (with up or down arrow on chroma 7120)
3. The LCD-indicator on chroma 7120 will show x = 313 ±28, y = 329 ±28, Ymin=200cd/m^2
4. Adjust the RED on OSD window until chroma 7120 indicator reached the value R=100
5. Adjust the GREEN on OSD, until chroma 7120 indicator reached G=100
6. Adjust the BLUE on OSD, until chroma 7120 indicator reached B=100
7. Repeat above procedure (item 5,6,7) until chroma 7120 RGB value meet the tolerance =100±2

b. Adjust **Color1** (9300^{0}K) color-temperature

8. Switch the chroma-7120 to **RGB-mode** (with press "MODE" button)
9. Switch the MEM.channel to Channel 4 (with up or down arrow on chroma 7120)
10. The LCD-indicator on chroma 7120 will show x = 283 ±28, y = 297 ±28, Ymin=180cd/m^2
11. Adjust the RED on OSD window until chroma 7120 indicator reached the value R=100
12. Adjust the GREEN on OSD, until chroma 7120 indicator reached G=100
13. Adjust the BLUE on OSD, until chroma 7120 indicator reached B=100
14. Repeat above procedure (item 5,6,7) until chroma 7120 RGB value meet the tolerance =100±2

c. Adjust **Color2** (5700^{0}K) color-temperature

15. Switch the chroma-7120 to **RGB-mode** (with press "MODE" button)
16. Switch the MEM.channel to Channel 9 (with up or down arrow on chroma 7120)
17. The LCD-indicator on chroma 7120 will show x = 328 ±28, y = 344 ±28, Ymin=200 cd/m^2
18. Adjust the RED on OSD window until chroma 7120 indicator reached the value R=100

19. Adjust the GREEN on OSD, until chroma 7120 indicator reached G=100

20. Adjust the BLUE on OSD, until chroma 7120 indicator reached B=100

21. Repeat above procedure (item 5,6,7) until chroma 7120 RGB value meet the tolerance =100±2

22. Move cursor to " Exit/Save" sub-menu and press MENU key to save adjust value and exit.

Turn the POWER-button off to on to quit from factory mode.

Max Brightness measurement: >300 cd/㎡

Test conditions:

a. Switch to the full white pattern, in user mode main menu:

1. Set <Color Settings> Red, Green, and Blue to the max.
2. Set <Brightness> Brightness, Contrast to the max.

b. The Minimum brightness is ：**<** 40% of Max luminance (max luminance = max contrast + max brightness)

Test conditions:

Set <Brightness> Brightness, Contrast to the min.

11. ISP Instruction

Configure and procedure

It is a windows-based program, which cannot be run in MS-DOS.

System and equipment requirements

(1). An i486 (or above) personal computer or computer or compatible.

(2). Microsoft operation system Window 95/98/2000/XP.

(3). ISP Tool: ISP board/printer cable/VGA cable as shown in Fig.1

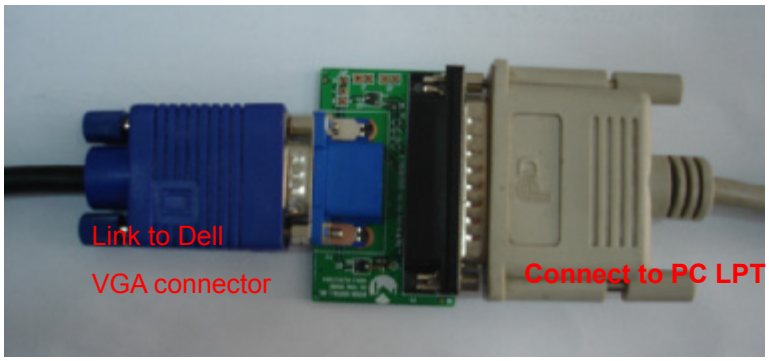
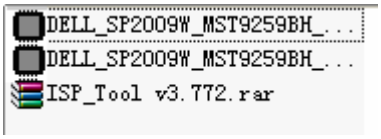


Fig.1

(4). ISP software checklist



(5). Update the firmware

Step 1: Double click the ISP_Tool v3.772.exe

icon and click Connect, bring up Fig.2

Fig.2

Step 2: Click OK and click Read, select program Bin file, bring up Fig.3

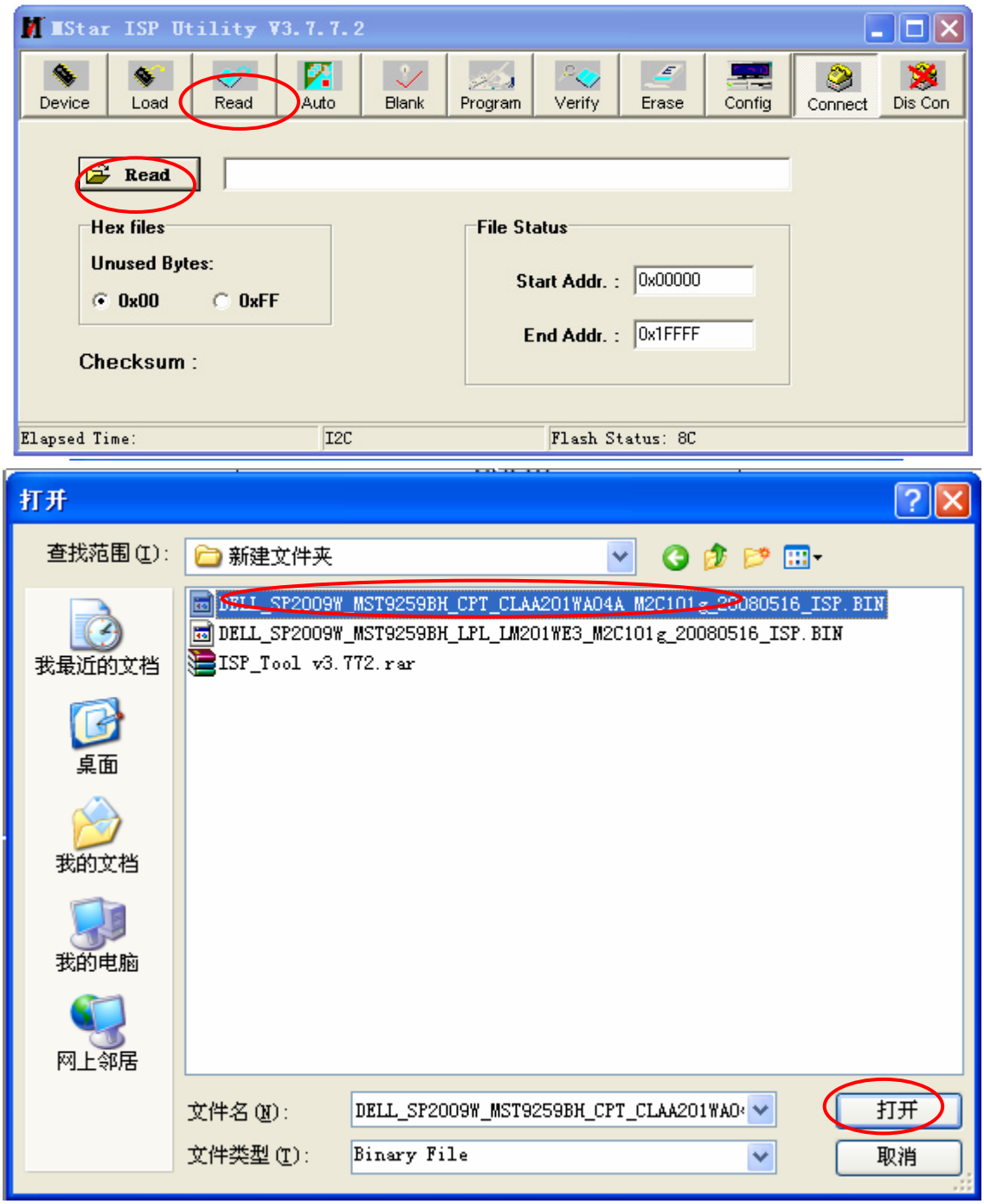


Fig.3

Step3: Click open and OK, bring up Fig.4 and Fig.5

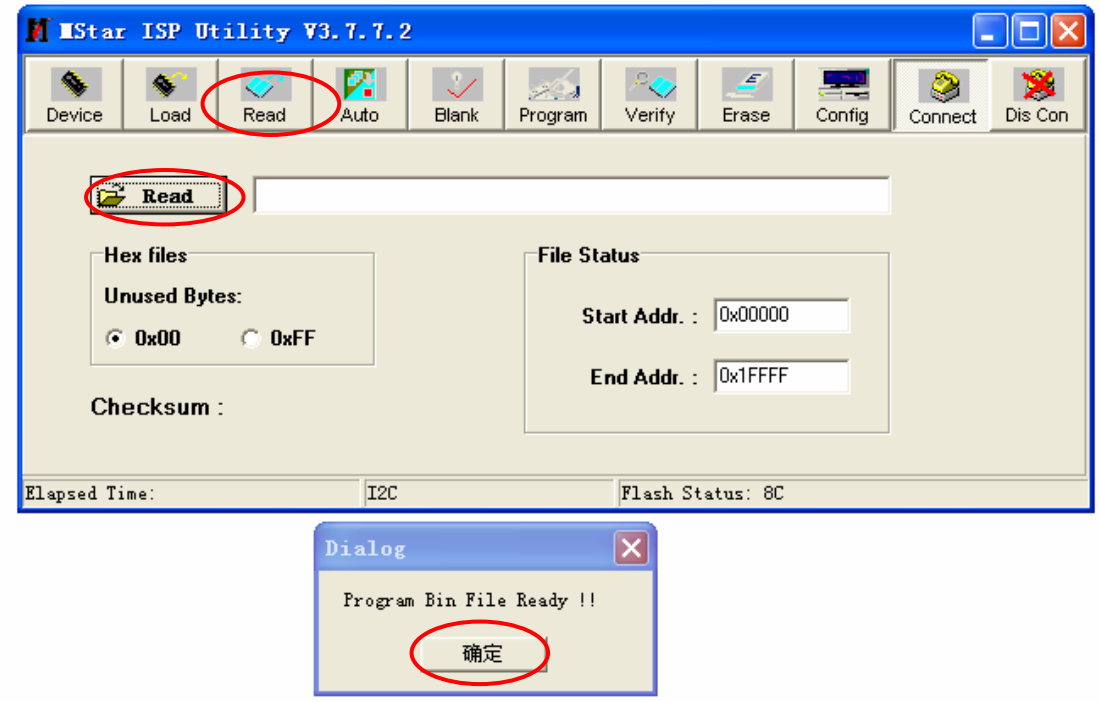


Fig.4

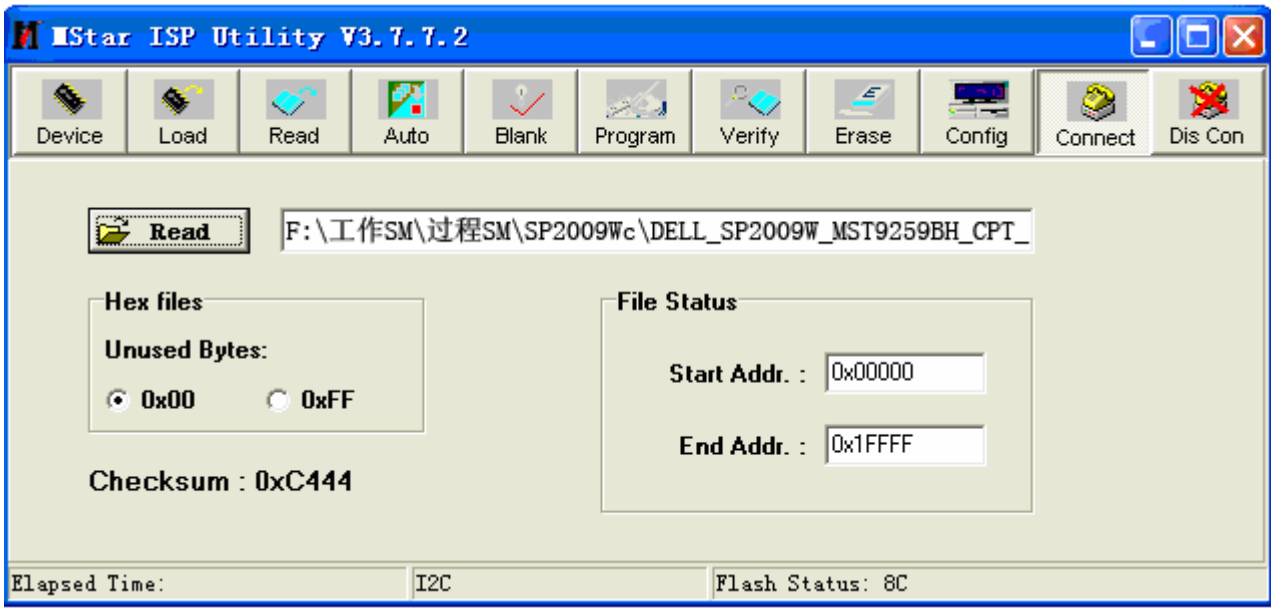


Fig.5

Step 4: Click Auto and Run, bring up Fig.6

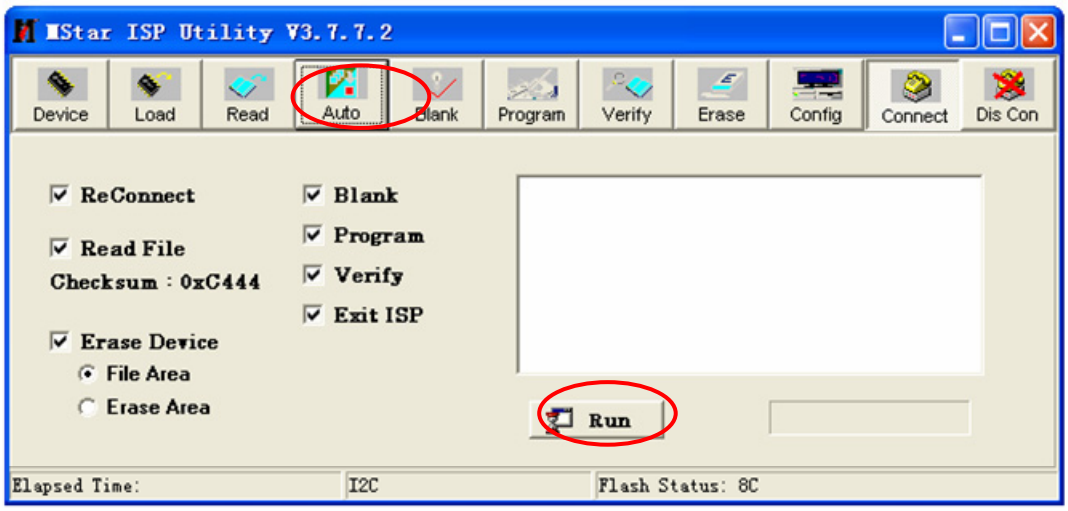


Fig.6

Step 5: When appear Verify OK, writer finished as shown Fig.7

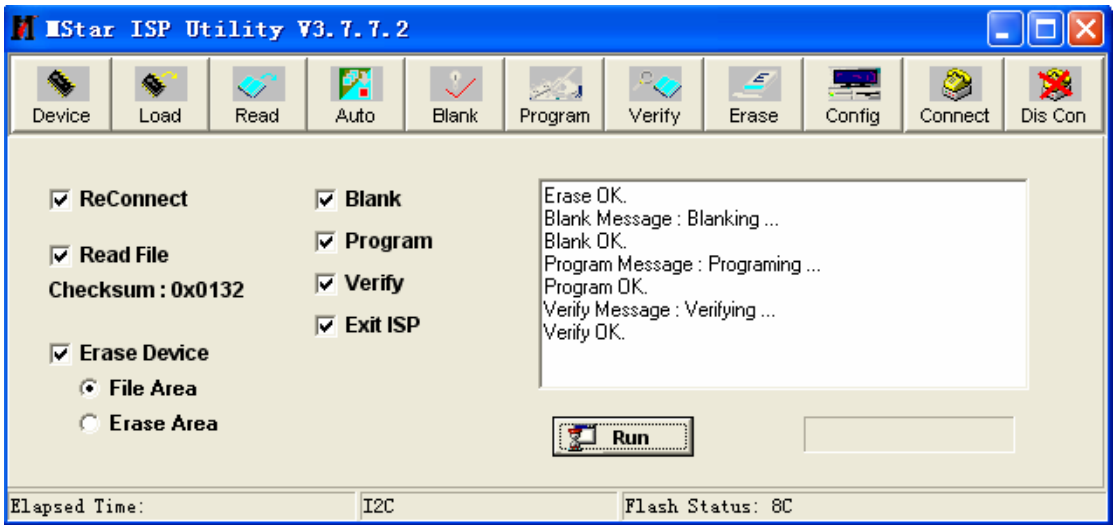
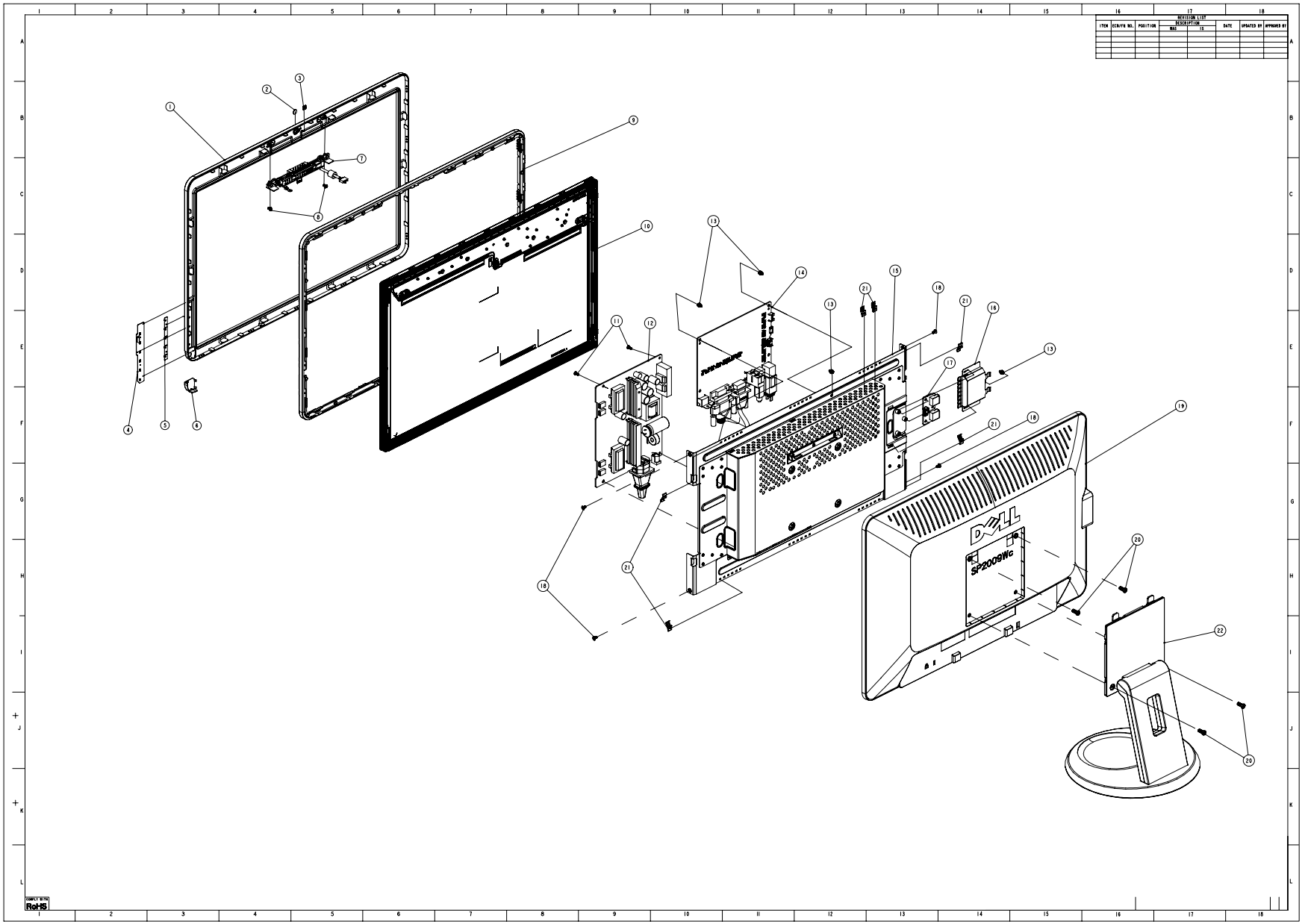


Fig.7

12. Exploded View



item	Description	item	Description
1	BEZEL L20W-8DELL2	12	POWER BOARD
2	CAMERA GLASS	13	SCREW
3	LED LENS	14	MAIN BOARD
4	KEY BOARD	15	MAIN FRAME
5	FUNCTION LENS	16	USB STEAM SHIELD
6	POWER BUTTON	17	USB BOARD
7	WEBCAM MODULE 52-04780-00A DELL-ASSIGN	18	SCREW
8	SCREW	19	REAR COVER L20W-8DELL2
9	MIDDLE RING	20	SCREW
10	PANEL	21	N/A
11	SCREW	22	HINGE ASS'Y FOR DELL

13. BOM List

TA8CMUHKWMDDBZ

TA8CMUNKWMDDBZ

Location	Part No.	Description
	012G6059 1	RUBBER
	017G WCM 4 LO	WEBCAM MODULE 52-04780-00A DELL-ASSIGN
	019G6014 1	TIE FOR STRIP
	040G 581 26704	SHIPPING LABEL
	041G 68508 A	CONTROL CARD
	044G6000 4 6B	PAPER BOARD
	044G9003 13	CORNER PAPER
	045G 77 3	PE PACKING
	050G 600 1 W	WHITE STRAP
	052G 1150 C	INSULATING TAPE
	052G 1186	SMALL TAPE
	052G 1211500	ALUMINUM FOIL TAPE
	052G6019 1	INSULATING TAPE
	052G6022 1500	SMALL TAPE
	070GHDCP500HDC	HDCP CODE
	089G 175523 G	USB CABLE 1.8M
E08902	089G 728CAA 2D	SIGNAL CABLE
E08903	089G1748GAA 1D	DVI CABLE
	089G402A18NYHD	POWER CORD
	095G8014 5D597	WIRE HARNESS 5P(PLUG)-5P
	0G1G1130 8120	SCREW
	0M1G1730 4120	SCREW
	0M1G1730 6120	SCREW,42-D020523
	0M1G1730 6120	SCREW,42-D020523
	0M1G1730 6120	SCREW,42-D020523
	0M1G2940 10225 CR3	SCREW
	0M1G3130 4120	SCREW
	0Q1G 330 5120	SCREW 42-D003574
E750	750GLCA1WAA33Z000D	PANEL CLAA201WA04A 336 FZ CPT
	A15G0425201	MAIN FRAME CPT
	A33G0427BCGA1L0100	POWER BUTTON
	A33G0428BCK 1C0100	FUNCTION LENS
	A33G0431BCK 1C0100	LED LENS
	A34G0790 VH 1X0130	BEZEL L20W-8DELL2
	A34G0791 VHA2B0130	REAR COVER L20W-8DELL2
	A34G0792BCE 1B0100	MIDDLE RING

	A37G0080 1	HINGE ASS'Y FOR DELL SP2008
	A85G0099101	USB STEAM SHIELD
	CBPC8CMUDLQ1	MAIN BOARD G3079-D-X-X-1-080424
	040G 45762412B	CBPC LABEL
CN709	033G3802 5B YH W	WAFER
CN701	033G380212B Y	WAFER
CN401	033G8019 7C JH	FFC CONNECTOR 7P
CN402	033G801930F CH JS	CONNECTOR
BZ401	078G BUZ 1 V	BUZZER 5V
CN703	088G 350 1 TN	USB CONN
CN702	088G 351 2B TN	USB CONN
CN101	088G 35315F H	D-SUB 15PIN
CN102	088G 35424F HA	DVI CONN 24P FEMALE + SHIELD
X703	093G 22 45 J	24MHZ/30PF/49US
X702	093G 22 45 J	24MHZ/30PF/49US
X402	093G 22 45 J	24MHZ/30PF/49US
X401	093G 22 53 J	14.31818MHZ/32PF/49US
CN708	095G 820 8X503	WIRE HARNESS 8P(SAN)-8P(PLUG)
	AIG8CMUDLQ1	CONVERSION BOARD FOR AI
C750	067G 215101 3T	100UF +-20% 16V
C749	067G 215101 3T	100UF +-20% 16V
C748	067G 215101 3T	100UF +-20% 16V
C743	067G 215101 3T	100UF +-20% 16V
C709	067G 305101 3T	100UF 16V 105C
C714	067G 305101 3T	100UF 16V 105C
C710	067G 305101 3T	100UF 16V 105C
C425	067G 305220 3T	22UF +-20% 16V
C422	067G 305220 3T	22UF +-20% 16V
C419	067G 305220 3T	22UF +-20% 16V
C416	067G 305220 3T	22UF +-20% 16V
C414	067G 305220 3T	22UF +-20% 16V
C410	067G 305220 3T	22UF +-20% 16V
C408	067G 305220 3T	22UF +-20% 16V
C406	067G 305220 3T	22UF +-20% 16V
C404	067G 305220 3T	22UF +-20% 16V
C401	067G 305220 3T	22UF +-20% 16V
C433	067G 305220 3T	22UF +-20% 16V
C442	067G 305220 3T	22UF +-20% 16V
C637	067G 305220 3T	22UF +-20% 16V
C726	067G 305221 3T	220UF/16V

C717	067G 305470 3T	47UF +-20% 16V
C730	067G 305470 3T	47UF +-20% 16V
C779	067G 305470 3T	47UF +-20% 16V
C783	067G 305470 3T	47UF +-20% 16V
C799	067G 305470 3T	47UF +-20% 16V
C713	067G 305470 3T	47UF +-20% 16V
C712	067G 305470 3T	47UF +-20% 16V
C711	067G 305470 3T	47UF +-20% 16V
C638	067G 305470 3T	47UF +-20% 16V
U704	056G 133 32 NS	LM3485 MSOP-8 NS
U401	056G 562148	IC MST9259BH-LF-165 LQFP-256
U711	056G 585 4	IC AIC1117-33PYTR-R AIC
U715	056G 585 4	IC AIC1117-33PYTR-R AIC
U703	056G 585 4	IC AIC1117-33PYTR-R AIC
U701	056G 585 4	IC AIC1117-33PYTR-R AIC
U702	056G 585 7A	AZ1117D-2.5-E1
U407	056G 615 9 1	IC EM6A9320BI-5MG 0.11UM "M" FBGA-144
U712	056G 659 9	IC USB2514-AEZG QFN-36
U710	056G 659 10	IC USB2512-AEZG QFN-36
U402	056G1125192(WDLMUWACKQ1)	IC W79L659A25FL QFP-100
U501	056G1133 34	M24C02-WMN6TP
U101	056G1133 34	M24C02-WMN6TP
U404	056G1133122(WDLMUTACKQ1)	IC W39L040AP70Z 4MB PLCC-32L
U405	056G113356A	24LC16B/SNG SOIC-8PIN
U403	056G4LVC373 PH	IC 74LVC373APW TSSOP-20
Q101	057G 417 12 T	KEC 2N3904S-RTK/PS
Q401	057G 417 12 T	KEC 2N3904S-RTK/PS
Q404	057G 417 12 T	KEC 2N3904S-RTK/PS
Q405	057G 417 12 T	KEC 2N3904S-RTK/PS
Q702	057G 417 12 T	KEC 2N3904S-RTK/PS
Q719	057G 417 12 T	KEC 2N3904S-RTK/PS
Q718	057G 417 12 T	KEC 2N3904S-RTK/PS
Q717	057G 417 12 T	KEC 2N3904S-RTK/PS
Q709	057G 417 12 T	KEC 2N3904S-RTK/PS
Q708	057G 417 12 T	KEC 2N3904S-RTK/PS
Q706	057G 417 12 T	KEC 2N3904S-RTK/PS
Q705	057G 417 12 T	KEC 2N3904S-RTK/PS
Q102	057G 417 13 T	KEC 2N3906S-RTK/PS
Q402	057G 417 13 T	KEC 2N3906S-RTK/PS
Q715	057G 417 13 T	KEC 2N3906S-RTK/PS

Q409	057G 759 2A	TANSISTOR 2N7002 SOT-23
Q408	057G 759 2A	TANSISTOR 2N7002 SOT-23
Q407	057G 759 2A	TANSISTOR 2N7002 SOT-23
Q406	057G 759 2A	TANSISTOR 2N7002 SOT-23
Q704	057G 763 1	A03401 SOT23 BY AOS(A1)
Q701	057G 763 3	AO4411 SO-8
Q716	057G 763 3	AO4411 SO-8
Q707	057G 763 3	AO4411 SO-8
RP401	061G 125220 8	RST CHIP AR 8P4R 22 OHM +-5% 1/16W
RP402	061G 125220 8	RST CHIP AR 8P4R 22 OHM +-5% 1/16W
RP403	061G 125220 8	RST CHIP AR 8P4R 22 OHM +-5% 1/16W
RP404	061G 125220 8	RST CHIP AR 8P4R 22 OHM +-5% 1/16W
RP405	061G 125220 8	RST CHIP AR 8P4R 22 OHM +-5% 1/16W
RP406	061G 125220 8	RST CHIP AR 8P4R 22 OHM +-5% 1/16W
RP407	061G 125220 8	RST CHIP AR 8P4R 22 OHM +-5% 1/16W
RP408	061G 125220 8	RST CHIP AR 8P4R 22 OHM +-5% 1/16W
F704	061G 56A075 LT	SMD PTC 0.75A 1206L075.WR 1206
F703	061G 56A075 LT	SMD PTC 0.75A 1206L075.WR 1206
F702	061G 56A075 LT	SMD PTC 0.75A 1206L075.WR 1206
F701	061G 56A075 LT	SMD PTC 0.75A 1206L075.WR 1206
R128	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
FB107	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
FB106	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
FB105	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
R583	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
R582	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
R564	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
R491	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
R490	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
R466	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
R123	061G0402000	RST CHIPR 0 OHM +-5% 1/16W
R426	061G0402100 1F	RST CHIPR 1KOHM +-1% 1/16W
R427	061G0402100 1F	RST CHIPR 1KOHM +-1% 1/16W
R529	061G0402100 9F	RST CHIPR 0402 10 OHM +-1% 1/16W
R528	061G0402100 9F	RST CHIPR 0402 10 OHM +-1% 1/16W
R527	061G0402100 9F	RST CHIPR 0402 10 OHM +-1% 1/16W
R526	061G0402100 9F	RST CHIPR 0402 10 OHM +-1% 1/16W
R522	061G0402100 9F	RST CHIPR 0402 10 OHM +-1% 1/16W
R520	061G0402100 9F	RST CHIPR 0402 10 OHM +-1% 1/16W
R422	061G0402100 9F	RST CHIPR 0402 10 OHM +-1% 1/16W

R414	061G0402100 9F	RST CHIPR 0402 10 OHM +-1% 1/16W
R587	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R494	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R486	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R485	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R470	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R469	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R459	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R456	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R423	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R418	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R412	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R119	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R118	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R586	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R585	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R121	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R120	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R110	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R109	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R108	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R783	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R707	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R706	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R705	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R704	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R588	061G0402101	RST CHIPR 100 OHM +-5% 1/16W
R784	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W
R509	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W
R503	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W
R112	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W
R111	061G0402102	RST CHIPR 1 KOHM +-5% 1/16W
R712	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R702	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R496	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R479	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R478	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R475	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R474	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R473	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W

R472	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R471	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R468	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R467	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R430	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R716	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R772	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R786	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R441	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R443	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R771	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R770	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R769	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R764	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R763	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R761	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R760	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R759	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R753	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R735	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R733	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R731	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R721	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R718	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R416	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R127	061G0402103	RST CHIPR 10 KOHM +-5% 1/16W
R768	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W
R765	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W
R758	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W
R757	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W
R744	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W
R742	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W
R741	061G0402104	RST CHIPR 100 KOHM +-5% 1/16W
R777	061G0402105	RST CHIPR 1MOHM +-5% 1/16W
R778	061G0402105	RST CHIPR 1MOHM +-5% 1/16W
R766	061G0402120 2D	RST CHIPR 12KOHM +-0.5% 1/16W
R767	061G0402120 2D	RST CHIPR 12KOHM +-0.5% 1/16W
R567	061G0402150 0D	RST CHIPR 150 OHM +-0.5% 1/16W
R787	061G0402153	RST CHIP 15K 1/16W 5%
R776	061G0402153	RST CHIP 15K 1/16W 5%

R775	061G0402153	RST CHIP 15K 1/16W 5%
R774	061G0402153	RST CHIP 15K 1/16W 5%
R773	061G0402153	RST CHIP 15K 1/16W 5%
R129	061G0402220	RST CHIPR 22 OHM +-5% 1/16W
R568	061G0402220	RST CHIPR 22 OHM +-5% 1/16W
R569	061G0402220	RST CHIPR 22 OHM +-5% 1/16W
R570	061G0402220	RST CHIPR 22 OHM +-5% 1/16W
R571	061G0402220	RST CHIPR 22 OHM +-5% 1/16W
R572	061G0402220	RST CHIPR 22 OHM +-5% 1/16W
R573	061G0402220	RST CHIPR 22 OHM +-5% 1/16W
R574	061G0402220	RST CHIPR 22 OHM +-5% 1/16W
R575	061G0402220	RST CHIPR 22 OHM +-5% 1/16W
R576	061G0402220	RST CHIPR 22 OHM +-5% 1/16W
R114	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W
R113	061G0402222	RST CHIPR 2.2 KOHM +-5% 1/16W
R101	061G0402330	RST CHIPR 33 OHM +-5% 1/16W
R102	061G0402330	RST CHIPR 33 OHM +-5% 1/16W
R103	061G0402330	RST CHIPR 33 OHM +-5% 1/16W
R795	061G0402330 F	RST CHIPR 33 OHM +-5% 1/16W FENGHUA
R796	061G0402330 F	RST CHIPR 33 OHM +-5% 1/16W FENGHUA
R424	061G0402390 0F	RST CHIP 390R 1/16W 1%
R104	061G0402471	RST CHIPR 470 OHM +-5% 1/16W
R505	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R499	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R493	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R492	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R484	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R483	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R476	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R463	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R454	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R432	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R417	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R415	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R125	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R506	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R115	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R116	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R117	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R124	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W

R599	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R598	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R785	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R722	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R717	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R715	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R709	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R703	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R507	061G0402472	RST CHIPR 4.7 KOHM +-5% 1/16W
R126	061G0402473	RST CHIPR 47 KOHM +-5% 1/16W
R504	061G0402473	RST CHIPR 47 KOHM +-5% 1/16W
R723	061G0402473	RST CHIPR 47 KOHM +-5% 1/16W
R730	061G0402473	RST CHIPR 47 KOHM +-5% 1/16W
R736	061G0402473	RST CHIPR 47 KOHM +-5% 1/16W
R738	061G0402473	RST CHIPR 47 KOHM +-5% 1/16W
R720	061G0402563	RST CHIP 56K 1/16W 5%
R105	061G0402750	RST CHIPR 75 OHM +-5% 1/16W
R106	061G0402750	RST CHIPR 75 OHM +-5% 1/16W
R107	061G0402750	RST CHIPR 75 OHM +-5% 1/16W
R498	061G0402750	RST CHIPR 75 OHM +-5% 1/16W
FB101	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
FB102	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
FB103	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
R590	061G0603153	RST CHIPR 15KOHM +-5% 1/10W
R591	061G0603220	RST CHIPR 22 OHM +-5% 1/10W
R589	061G0603316 2F	RST CHIPR 31.6 KOHM +-1% 1/10W
R713	061G0603333	RST CHIPR 33KOHM +-5% 1/10W
R131	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
R132	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
R133	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
R134	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
R135	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
R719	061G1206221	RST CHIPR 220 OHM +-5% 1/4W
R790	061G1206221	RST CHIPR 220 OHM +-5% 1/4W
C104	065G0402102 32	1000PF +-10% 50V X7R
C498	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C499	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C503	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C504	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C505	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R

C506	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C507	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C508	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C509	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C705	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C704	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C510	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C512	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C521	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C522	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C702	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C703	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C497	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C472	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C473	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C478	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C479	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C480	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C481	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C482	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C483	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C484	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C485	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C487	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C488	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C489	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C490	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C491	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C492	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C493	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C494	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C495	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C496	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C747	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C753	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C754	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C755	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C756	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C757	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C758	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R

C759	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C760	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C763	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C765	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C767	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C782	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C446	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C781	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C780	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C774	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C772	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C769	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C706	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C707	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C721	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C725	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C727	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C728	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C729	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C731	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C734	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C735	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C737	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C738	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C739	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C740	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C741	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C742	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C744	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C745	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C746	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C436	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C435	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C434	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C432	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C431	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C430	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C429	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C428	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C427	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R

C426	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C423	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C421	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C420	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C417	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C415	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C413	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C411	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C409	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C407	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C405	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C403	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C402	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C110	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C471	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C467	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C465	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C464	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C463	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C462	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C456	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C455	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C454	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C453	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C452	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C450	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C437	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C438	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C439	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C440	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C441	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C443	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C444	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C445	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C447	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C448	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C449	065G0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C468	065G0402220 31	CHIP 22PF 50V NPO
C469	065G0402220 31	CHIP 22PF 50V NPO
C751	065G0402220 31	CHIP 22PF 50V NPO

C752	065G0402220 31	CHIP 22PF 50V NPO
C761	065G0402220 31	CHIP 22PF 50V NPO
C762	065G0402220 31	CHIP 22PF 50V NPO
C424	065G0402220 31	CHIP 22PF 50V NPO
C418	065G0402220 31	CHIP 22PF 50V NPO
C112	065G0402220 31	CHIP 22PF 50V NPO
C111	065G0402220 31	CHIP 22PF 50V NPO
C113	065G0402224A5T	MLCC 0402 0.22UF K 10V X
C502	065G0402224A5T	MLCC 0402 0.22UF K 10V X
C466	065G0402224A5T	MLCC 0402 0.22UF K 10V X
C718	065G0402224A5T	MLCC 0402 0.22UF K 10V X
C101	065G0402473 12	CHIP 0.047UF 16V X7R
C102	065G0402473 12	CHIP 0.047UF 16V X7R
C103	065G0402473 12	CHIP 0.047UF 16V X7R
C105	065G0402473 12	CHIP 0.047UF 16V X7R
C106	065G0402473 12	CHIP 0.047UF 16V X7R
C107	065G0402473 12	CHIP 0.047UF 16V X7R
C720	065G0603102 32	1000PF +-10% 50V X7R
C719	065G0603102 32	1000PF +-10% 50V X7R
C716	065G0603102 32	1000PF +-10% 50V X7R
C715	065G0603102 32	1000PF +-10% 50V X7R
C736	065G0805105 37	CHIP 1UF 50V Y5V
C764	065G0805475 17	0805 4.7UF +80%~-20% 16V Y5V
C766	065G0805475 17	0805 4.7UF +80%~-20% 16V Y5V
C768	065G0805475 17	0805 4.7UF +80%~-20% 16V Y5V
C770	065G0805475 17	0805 4.7UF +80%~-20% 16V Y5V
FB704	071G 56K121	CHIP BEAD
FB714	071G 56K121	CHIP BEAD
FB713	071G 56K121	CHIP BEAD
FB722	071G 56K121	CHIP BEAD
FB721	071G 56K121	CHIP BEAD
FB720	071G 56K121	CHIP BEAD
FB719	071G 56K121	CHIP BEAD
FB716	071G 56K121	CHIP BEAD
FB703	071G 56K121	CHIP BEAD
FB702	071G 56K121	CHIP BEAD
FB701	071G 56K121	CHIP BEAD
FB421	071G 56K121	CHIP BEAD
FB420	071G 56K121	CHIP BEAD
FB401	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL

FB402	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL
FB403	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL
FB404	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL
FB405	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL
FB406	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL
FB407	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL
FB408	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL
FB409	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL
FB410	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL
FB411	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL
FB412	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL
FB413	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL
FB425	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL
FB426	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL
FB723	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL
FB724	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL
FB725	071G 56V301 B	CHIP BEAD FCM2012VF-301T07 BULLWILL
FB104	071G 59B121	TB160808B
L706	073G253S 6 R	SMD CHOKE 90 OHM 0805
L705	073G253S 6 R	SMD CHOKE 90 OHM 0805
L704	073G253S 6 R	SMD CHOKE 90 OHM 0805
L703	073G253S 6 R	SMD CHOKE 90 OHM 0805
L702	073G253S 6 R	SMD CHOKE 90 OHM 0805
L701	073G253S 6 R	SMD CHOKE 90 OHM 0805
L707	073G253S 18 K	IND SMD CHOKE 22UH+/-20% KINGCORE
D502	093G 64 42 P	BAV70 SOT23 BY PAN JIT
D105	093G 64 42 P	BAV70 SOT23 BY PAN JIT
D104	093G 6432P	LL4148
D701	093G 6432P	LL4148
D705	093G 6432P	LL4148
D706	093G 6432P	LL4148
D101	093G 6433P	BAV99
D102	093G 6433P	BAV99
D103	093G 6433P	BAV99
D501	093G 6433P	BAV99
D503	093G 6433P	BAV99
D506	093G 6433P	BAV99
D507	093G 6433P	BAV99
D504	093G 6433P	BAV99
D505	093G 6433P	BAV99

D508	093G 6433P	BAV99
D509	093G 6433P	BAV99
ZD103	093G 39S 24 T	RLZ 5.6B LLDS
ZD102	093G 39S 24 T	RLZ 5.6B LLDS
ZD101	093G 39S 24 T	RLZ 5.6B LLDS
ZD104	093G 39S 24 T	RLZ 5.6B LLDS
ZD105	093G 39S 24 T	RLZ 5.6B LLDS
ZD106	093G 39S 24 T	RLZ 5.6B LLDS
ZD505	093G 39S 24 T	RLZ 5.6B LLDS
ZD504	093G 39S 24 T	RLZ 5.6B LLDS
ZD503	093G 39S 24 T	RLZ 5.6B LLDS
ZD502	093G 39S 24 T	RLZ 5.6B LLDS
ZD501	093G 39S 24 T	RLZ 5.6B LLDS
D106	093G 60S 15 T	DIODE RB160M-60TE25 SOD-123 ROHM
D702	093G8004 2	SBM84 BY CHENMKO
	715G3079 D HF	MAIN BOARD PCB
	Q16G0002 10 2	GASKET
	Q16G0002 10 3	GASKET
	KEPC8QDA	KEY G3096-C-HF-X-1-080324
CN1	089G 76J 7501	FFC CABLE 7PIN
	Q05G6084 1	WAHSER
U110	056G 665 37	IC SO380001-24QFN QFN-24
R152	061G0603470	RST CHIPR 47 OHM +-5% 1/10W
C121	065G0603102 32	1000PF +-10% 50V X7R
C130	065G0603104 12	CER2 0603 X7R 16V 100N P
C123	065G0603105 12	CHIP 1UF 16VX7R 0603
C122	065G0603105 12	CHIP 1UF 16VX7R 0603
C126	065G0603109 31	CAP CHIP 0603 1PF J 50V NPO
C127	065G0603159 31	CAP CHIP 0603 1.5PF J 50V NPO
C124	065G0603201 31	CHIP 200PF 50V NPO
C128	065G0603209 21	CHIP 2PF 25V NPO
C129	065G0603271 31	CHIP 270PF 50V NPO
C125	065G0603309 31	CAP CHIP 0603 3PF J 50V NPO
LED1	081G 14 30 EL	CHIP LED YELLOW / WHITE
LED001	081G 14 31 EL	CHIP LED WHITE
LED002	081G 14 31 EL	CHIP LED WHITE
LED003	081G 14 31 EL	CHIP LED WHITE
LED005	081G 14 31 EL	CHIP LED WHITE
LED004	081G 14 31 EL	CHIP LED WHITE
	715G3096 D HF	KEY PCB FR-4 104X16.75X0.8MM DS

R155	061G0603101	RST CHIPR 100 OHM +-5% 1/10W
C131	065G0603209 21	CHIP 2PF 25V NPO
C132	065G0603209 21	CHIP 2PF 25V NPO
	PWPC8A42CQA1	POWER G2778-I-X-X-3-080425
	040G 45762412B	CBPC LABEL
	011G6091 1	NYLON-SPACER SUPPORT
	012G6078 1	PORON INVERTER
CN804	033G8021 2E U	INVERT CONNECTOR
CN803	033G8021 2E U	INVERT CONNECTOR
CN802	033G8021 2E U	INVERT CONNECTOR
CN801	033G8021 2E U	INVERT CONNECTOR
	051G 6 4503	GLUE_RTV
IC902	056G 139 3A	IC PC123Y22FZ0F
NR901	061G 58050 WT	NTC 5 OHM 5A
C900	063G107K474 US	0.47UF +-10%
C909	065G 1K103 2E6213	CAP CER 10NF K 1KV
C811	065G 6J1006ET	10PF 5% SL 6KV
C801	065G 6J1006ET	10PF 5% SL 6KV
C902	065G305M2222BP	2200PF +-20%
C901	065G305M2222BP	2200PF +-20%
C932	065G306M4722BP	4700PF +-20% 400VAC
C903	067G 40Z18115K	CAP 105¡Æ 180UF M 450V
C935	067G215B6814RV	CAP 105℃ 680UF M 25V 10*20
C926	067G215B6814RV	CAP 105℃ 680UF M 25V 10*20
C925	067G215B6814RV	CAP 105℃ 680UF M 25V 10*20
C803	067G215B6814RV	CAP 105℃ 680UF M 25V 10*20
C802	067G215B6814RV	CAP 105℃ 680UF M 25V 10*20
C919	067G215V102 4N GP	KY25VB1000M-CC3 12.5*20
C922	067G215V102 4N GP	KY25VB1000M-CC3 12.5*20
C923	067G215V102 4N GP	KY25VB1000M-CC3 12.5*20
C924	067G215V102 4N GP	KY25VB1000M-CC3 12.5*20
C940	067G215V102 4N GP	KY25VB1000M-CC3 12.5*20
L921	073G 253 91 L	CHOKE BY LI TA
L922	073G 253 91 L	CHOKE BY LI TA
L901	073L 174 50 LH	LINE FILTER
T801	080GL19T 24 YS	X'FMR 740MH YS04170157
T802	080GL19T 24 YS	X'FMR 740MH YS04170157
T901	080GL19T 35 N	X'FMR 450UH YUVA-908
CN901	087G 501 32 S	AC SOCKET
CN903	088G 304 8K C	DC JACK

CN902	095G 82012D507	WIRE HARNESS 12P(SAN)-12P(PLUG)
	705GQ793064	BD901/Q900 ASS'Y
Q900	057G 667 21	STP10NK70ZFP
HS1	090G6281 1	HEAT SINK
BD901	093G 50460 36	BRIDGE D3SB80 4A/800V 3S
	0M1G1730 10120	SCREW 42A9930016
	705GQ893016	D920 ASS'Y
HS3	090G6280 1	HEAT SINK
D920	093G 60258	DIODE FME-220B TO-220 SANKEN
	0M1G1730 8120	SCREW
	705GQ893017	D921/IC922 ASS'Y
IC922	056G 563 37	KA278R12CTU TO-220F-4L
HS2	090G6240 3	HEAT SINK
D921	093G 60247	FME-220A
	0M1G1730 8120	SCREW
IC801	056G 379 22	IC TL494IDR SOIC-16
IC901	056G 379 76	IC LD7552BPS SOP-8
Q903	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q811	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q807	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q806	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q801	057G 417 4	PMBS3904/PHILIPS-SMT(04)
Q804	057G 417 6	PMBS3906/PHILIPS-SMT(06)
Q812	057G 417 6	PMBS3906/PHILIPS-SMT(06)
Q802	057G 600 55	P5506 HVG SO-8
Q803	057G 600 55	P5506 HVG SO-8
Q809	057G 759 2	RK7002
Q810	057G 759 2	RK7002
Q922	057G 760 5	DTC144WKA BY ROHM SMT
Q808	057G 760 4B	PDTA144WK SOT346
Q805	057G 760 5B	PDTC144WK SOT346
Q921	057G 761 18 T	TRA SST2222A SST3 ROHM
R827	061G0603000	RST CHIPR 0 OHM +-5% 1/10W
R826	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R824	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R822	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R821	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R818	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R812	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R809	061G0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W

R803	061G0603105	RST CHIPR 1M OHM +-5% 1/10W
R835	061G0603105	RST CHIPR 1M OHM +-5% 1/10W
R862	061G0603105	RST CHIPR 1M OHM +-5% 1/10W
R831	061G0603240 1F	RST CHIPR 2.4 KOHM +-1% 1/10W
R819	061G0603360 1F	RST CHIPR 3.6K OHM +-1% 1/10W
R823	061G0603360 1F	RST CHIPR 3.6K OHM +-1% 1/10W
R811	061G0603360 1F	RST CHIPR 3.6K OHM +-1% 1/10W
R861	061G0603390 3F	RST CHIPR 390 KOHM +-1% 1/10W
R807	061G0603470 2F	RST CHIPR 47 KOHM +-1% 1/10W
R820	061G0603470 2F	RST CHIPR 47 KOHM +-1% 1/10W
R854	061G0603680 2F	RST CHIPR 68K OHM +-1% 1/10W
R853	061G0603680 2F	RST CHIPR 68K OHM +-1% 1/10W
R841	061G0603680 2F	RST CHIPR 68K OHM +-1% 1/10W
R806	061G0603680 2F	RST CHIPR 68K OHM +-1% 1/10W
R851	061G0603820 1F	RST CHIPR 8.2 KOHM +-1% 1/10W
RJ801	061G0805000	RST CHIPR 0 OHM +-5% 1/8W
RJ901	061G0805000	RST CHIPR 0 OHM +-5% 1/8W
R850	061G0805100	10 OHM 1/10W
R839	061G0805100	10 OHM 1/10W
R928	061G0805100 1F	RST CHIPR 1K OHM +-1% 1/8W
R834	061G0805100 2F	RST CHIPR 10KOHM +-1% 1/8W
R833	061G0805100 2F	RST CHIPR 10KOHM +-1% 1/8W
R832	061G0805100 2F	RST CHIPR 10KOHM +-1% 1/8W
R828	061G0805100 2F	RST CHIPR 10KOHM +-1% 1/8W
R817	061G0805100 2F	RST CHIPR 10KOHM +-1% 1/8W
R813	061G0805100 2F	RST CHIPR 10KOHM +-1% 1/8W
R808	061G0805100 2F	RST CHIPR 10KOHM +-1% 1/8W
R911	061G0805100 3F	RST CHIPR 100KOHM +-1% 1/8W
R804	061G0805101	RST CHIPR 100 OHM +-5% 1/8W
R913	061G0805102	RST CHIPR 1K OHM +-5% 1/8W
R925	061G0805102	RST CHIPR 1K OHM +-5% 1/8W
R927	061G0805102	RST CHIPR 1K OHM +-5% 1/8W
R943	061G0805102	RST CHIPR 1K OHM +-5% 1/8W
R915	061G0805103	RST CHIPR 10K OHM +-5% 1/8W
R801	061G0805150 1F	RST CHIPR 1.5 KOHM +-1% 1/8W
R814	061G0805150 1F	RST CHIPR 1.5 KOHM +-1% 1/8W
R815	061G0805150 1F	RST CHIPR 1.5 KOHM +-1% 1/8W
R816	061G0805150 1F	RST CHIPR 1.5 KOHM +-1% 1/8W
R929	061G0805240 1F	RST CHIPR 2.4K OHM +-1% 1/8W
R810	061G0805300 2F	RST CHIPR 30K OHM +-1% 1/8W

R926	061G0805330 2F	RST CHIPR 33K OHM +-1% 1/8W
R825	061G0805390	RST CHIPR 39 OHM +-5% 1/8W
R829	061G0805390	RST CHIPR 39 OHM +-5% 1/8W
R924	061G0805390 1F	RST CHIPR 3.9 KOHM +-1% 1/8W
R837	061G0805473	RST CHIPR 47K OHM +-5% 1/8W
RJ902	061G1206000	RST CHIPR 0 OHM +-5% 1/4W
F801	061G1206000 4	RST CHIPR 0 OHM +-5% 1/4W
F902	061G1206000 4	RST CHIPR 0 OHM +-5% 1/4W
R912	061G1206100	RST CHIPR 10 OHM +-5% 1/4W
R935	061G1206101	RST CHIPR 100 OHM +-5% 1/4W
R936	061G1206101	RST CHIPR 100 OHM +-5% 1/4W
R937	061G1206101	RST CHIPR 100 OHM +-5% 1/4W
R938	061G1206101	RST CHIPR 100 OHM +-5% 1/4W
R939	061G1206101	RST CHIPR 100 OHM +-5% 1/4W
R940	061G1206101	RST CHIPR 100 OHM +-5% 1/4W
R946	061G1206102	RST CHIPR 1K OHM +-5% 1/4W
R945	061G1206102	RST CHIPR 1K OHM +-5% 1/4W
R944	061G1206102	RST CHIPR 1K OHM +-5% 1/4W
R941	061G1206102	RST CHIPR 1K OHM +-5% 1/4W
R855	061G1206150	RST CHIPR 15 OHM +-5% 1/4W
R857	061G1206150	RST CHIPR 15 OHM +-5% 1/4W
R856	061G1206150	RST CHIPR 15 OHM +-5% 1/4W
R858	061G1206150	RST CHIPR 15 OHM +-5% 1/4W
R910	061G1206229	RST CHIPR 2.2 OHM +-5% 1/4W
R900	061G1206334	RST CHIPR 330KOHM +-5% 1/4W
R901	061G1206334	RST CHIPR 330KOHM +-5% 1/4W
R902	061G1206334	RST CHIPR 330KOHM +-5% 1/4W
R903	061G1206394	RST CHIPR 390 KOHM +-5% 1/4W
R904	061G1206394	RST CHIPR 390 KOHM +-5% 1/4W
R905	061G1206394	RST CHIPR 390 KOHM +-5% 1/4W
R906	061G1206514	RST CHIPR 510 KOHM +-5% 1/4W
R907	061G1206514	RST CHIPR 510 KOHM +-5% 1/4W
R908	061G1206514	RST CHIPR 510 KOHM +-5% 1/4W
C842	065G0603103 12	CHIP 0.01UF 16V X7R
C807	065G0603104 22	CAP CHIP 0603 0.1UF K 25V X7R
C821	065G0603104 22	CAP CHIP 0603 0.1UF K 25V X7R
C825	065G0603104 22	CAP CHIP 0603 0.1UF K 25V X7R
C834	065G0603104 22	CAP CHIP 0603 0.1UF K 25V X7R
C815	065G0603222 22	CHIP 2200PF 25V X7R
C816	065G0603222 22	CHIP 2200PF 25V X7R

C819	065G0603222 22	CHIP 2200PF 25V X7R
C823	065G0603222 22	CHIP 2200PF 25V X7R
C928	065G0805102 32	CHIP 1000P 50VX7R 0805
C805	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
C824	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
C905	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
C927	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
C930	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
C936	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
C937	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
C938	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
C822	065G0805105 22	CAP CHIP 0805 1UF K 25V X7R
C907	065G0805221 21	220PF 25V 5%
C839	065G0805221 31	CAP CHIP 0805 220PF J 50V NPO
C840	065G0805221 31	CAP CHIP 0805 220PF J 50V NPO
C838	065G0805221 31	CAP CHIP 0805 220PF J 50V NPO
C841	065G0805221 31	CAP CHIP 0805 220PF J 50V NPO
C934	065G0805223 22	CHIP 0.022UF 25V X7R 080
C845	065G0805225 12	CAP CHIP 0805 2.2UF K 16V X7R
C820	065G0805331 31	CHIP 330PF 50V NPO
C920	065G1206102 72	CAP CHIP 1206 1000PF K 500V X7R
C921	065G1206102 72	CAP CHIP 1206 1000PF K 500V X7R
C939	065G1206104 32	CHIP 0.1UF 25V X7R 1206
LB902	071G 57G601	TI3216JIG
LB901	071G 57G601	TI3216JIG
D804	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D803	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D802	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D801	093G 64 33	DIO SIG SM BAV99 (PHSE)R
D805	093G 64 38 P	BAW56
D808	093G 64 38 P	BAW56
ZD922	093G 39S 25 T	RLZ5.1B LLDS
ZD921	093G 39S 40 T	RLZ 13B LLDS
ZD902	093G 39S 40 T	RLZ 13B LLDS
D806	093G 64S511SEM	IN4148W
D809	093G 64S511SEM	IN4148W
D814	093G 64S511SEM	IN4148W
D817	093G 64S511SEM	IN4148W
D922	093G 64S511SEM	IN4148W
D923	093G 64S511SEM	IN4148W

CN901	006G 31500	EYELET
IC921	056G 158 12	KIA431A-AT/P TO-92
R930	061G 17210252T	1K OHM 5% 1/4W
R922	061G 17222152T	220 OHM 5% 1/4W
R931	061G 17247252T	CFR 4.7K OHM +-5% 1/4W
R909	061G152M10452T	RST MOFR 100KOHM +-5% 2WS
R916	061G152M27852T	RST MOFR 0.27 OHM +-5% 2WS
C910	065G 1K101 5T6921	100PF /1KV
C904	065G 1K152 1T	1.5NF/1KV Z5F+-10%
C906	067G 2153307NT	KY50VB33M-TP5 6.3*11
FB901	071G 55 9 T	FERRITE BEAD
FB902	071G 55 9 T	FERRITE BEAD
F901	084G 56 4W	FUSE 4.0A 250V
D810	093G 522SE26T	SR240S
D811	093G 522SE26T	SR240S
D812	093G 522SE26T	SR240S
D813	093G 522SE26T	SR240S
D901	093G 6038T52T	FR103
D900	093G1100 1152T	DIODE PR1007R 1A/1000V DO-41
	715G2778 I HF	POWER BOARD PCB FR-1 143X178X1.6MM SS
C931	065G0805104 32	CAP CHIP 0805 0.1UF K 50V X7R
	Q52G6025 13178	INSULATE SHEET
L902	S73G17477V	FILTER
	Q23G3178700 9A	DELL LOGO
	Q35G0037 1	CAMERA GLASS
	Q40G 20N700 7A	RATING LABEL
	Q40G0001624 4A	PALLET LABEL
	Q40G0001700 4A	DELL CARTON LABEL
	Q41G7800700A25	SP2009W QSG FOR WEST
	Q41G7800700A27	PIG FOR DAO
	Q44G6002113 94	PAPER BOARD
	Q44G6002CP212A	PAPER CAP
	Q44G9003104	CORNER PAPER
	Q44GA053101	PULP MOLD
	Q44GA053201	PULP MOLD
	Q44GA053700 1A	20 LCD DELL CARTON
	Q44GSLIP10076A	PLASTIC SLIPSHEET
	Q45G 88609154	EPE BAG
	Q45G 88609155	EPE BAG

	Q52G 1185 91	BIG TAPE FOR DELL CARTON
	Q52G 3 69	3M DOUBLE FACE TAPE
	Q52G6020 59	EPE PROTECT FILM
	Q70G2002700 4A	SP2009W CD MANUAL
E08907	S89G179T30NA07	FFC CABLE
	089F80001653AG	1.0*30*2.5-165-3-0.65*0.05
	033F303FH10BK3	F1010HA-30P-BK
	033F303FJSHK30	1.0S-19-30A
	USB8QD1	USB BPARD PCB G2727-D-X-X-1-080421
CN707	033G3802 8B YH W	WAFER
CN705	088G 352 7A ST	USB CONNECTOR A TYPE REVERSE
CN706	088G 352 7A ST	USB CONNECTOR A TYPE REVERSE
C732	065G601M104 7T	0.1UF +-20% 50V Y5V
C733	065G601M104 7T	0.1UF +-20% 50V Y5V
	715G2727 E HF	USB PCB FR-1 25X48X1.6MM SS
	P40GD000813 9A	FAMILY SHEET
	Q40G0001700 1A	LABEL

14. Different Parts List

Diversity of TA8GMUHKWMDDBZ compared with TA8CMUHKWMDDBZ		
Location	**Part No.**	**Description**
E08911	089G179E30NA11	FFC CABLE
E750L	750GLGA1W3J21Z000D	PANEL LM201WE3-TLJ1 KR LPL
E750L	750GLGA1W3J32Z000D	PANEL LM201WE3-TLJ3 NJ LPL
	A15G0425101	MAINFRAME LPL
	A34G0791 VHA1B0130	REAR COVER L20W-8DELL2
	CBPC8GMUDLQ1	MAIN BOARD G3079-1-X-X-1-080520
	051G6002 2 GP	ACCELERANT
	051G6002 3 GP	THERMAL ADHESIVE
FOR U401	090G 372 2	HEAT SINK
	715G3079 D HF	MAIN BOARD PCB FR-4 120X159X1.6MM 4/L
	PWPC8A42LAA1	POWER BOARD G2778-1-X-X-2-080506
C811	065G 6J5096ET	CAP CER 5PF J 6KV
C801	065G 6J5096ET	CAP CER 5PF J 6KV
E08911	S89G179T30NA11	LVDS ASSY
	071FW100001012	40*12*6.5-1.5+H/S
	044F3231 167C4	5760 30*10*0.8

Diversity of TA8GMUNMWMDDBC compared with TA8CMUHKWMDDBZ		
Location	**Part No.**	**Description**
	041G 68623 1A	CERTIFICATED CARD
	044G9003194	CORNER PAPER
E08911	089G179E30NA11	FFC CABLE
E750L	750GLGA1W3J21D000D	PANEL LM201WE3-TLJ1 KR LGD
E750L	750GLGA1W3J32D000D	PANEL LM201WE3-TLJ3 NJ LGD
	A15G0425101	MAINFRAME LPL
	A34G0791 VHA1B0130	REAR COVER L20W-8DELL2
	CBPC8GMUDLQ1	MAIN BOARD G3079-1-X-X-1-080520
	051G6002 2 GP	ACCELERANT
	051G6002 3 GP	THERMAL ADHESIVE
FOR U401	090G 372 2	HEAT SINK
	715G3079 D HF	MAIN PCB FR-4 120X159X1.6MM 4/L
	PWPC8A42LAA1	POWER BOARD G2778-1-X-X-2-080506
C811	065G 6J5096ET	CAP CER 5PF J 6KV
C801	065G 6J5096ET	CAP CER 5PF J 6KV
	Q07G 1 5D36	WOODEN PALLET
	Q41G780070071A	DVI SHEET
	Q41G7800700A26	SP2009W QSG FOR EAST

	Q41G7800700A28	PIG FOR APCC
	Q44GA053700 2B	20 LCD DELL CTN
E08911	S89G179T30NA11	LVDS ASSY
	071FW100001012	40*12*6.5-1.5+h/s
	044F3231 167C4	5760 30*10*0.8

Diversity of TA8GMUNLWMDLBC compared with TA8CMUHKWMDDBZ		
Location	**Part No.**	**Description**
	089G412A18NIS3	POWER CORD/32E1818058
E750L	750GLGA1W3J21D000D	PANEL LM201WE3-TLJ1 KR LGD
	A15G0425101	MAINFRAME LPL
	A34G0791 VHA1B0130	REAR COVER L20W-8DELL2
	CBPC8GMUDLQ1	MAIN BOARD G3079-1-X-X-1-080520
FOR U401	090G 372 2	HEAT SINK
	715G3079 D HF	MAIN PCB FR-4 120X159X1.6MM 4/L
	PWPC8A42LAA1	POWER BOARD G2778-1-X-X-2-080506
C811	065G 6J5096ET	CAP CER 5PF J 6KV
C801	065G 6J5096ET	CAP CER 5PF J 6KV
	Q41G780070071A	DVI SHEET
	Q41G7800700A26	SP2009W QSG FOR EAST
	Q41G7800700A28	PIG FOR APCC
E08911	S89G179T30NA11	LVDS ASSY
	071FW100001012	40*12*6.5-1.5+H/S
	044F3231 167C4	5760 30*10*0.8

Diversity of TA8CMUNLWMDLBC compared with TA8CMUHKWMDDBZ		
Location	**Part No.**	**Description**
	089G412A18NIS3	POWER CORD/32E1818058
E750	750GLCA1WAA33D000D	PANEL CLAA201WA04A 336 FZ CPT
	Q41G780070071A	DVI sheet
	Q41G7800700A26	SP2009W QSG FOR EAST
	Q41G7800700A28	PIG FOR APCC

Diversity of TA8GMUNJWMDDBCcompared with TA8CMUHKWMDDBZ		
Location	**Part No.**	**Description**
	044G9003194	CORNER PAPER
	089G401A18NHRA	POWER CORD
E750L	750GLGA1W3J21D000D	PANEL LM201WE3-TLJ1 KR LGD
	A15G0425101	MAINFRAME LPL
	A34G0791 VHA1B0130	REAR COVER L20W-8DELL2

	CBPC8GMUDLQ1	MAIN BOARD G3079-1-X-X-1-080520
FOR U401	090G 372 2	HEAT SINK
	715G3079 D HF	MAIN PCB FR-4 120x159x1.6mm 4/L
	PWPC8A42LAA1	POWER G2778-1-X-X-2-080506
C811	065G 6J5096ET	CAP CER 5PF J 6KV
C801	065G 6J5096ET	CAP CER 5PF J 6KV
	Q07G 1 5D36 X	WOODEN PALLET
	Q41G7800700A26	SP2009W QSG FOR EAST
	Q41G7800700A28	PIG FOR APCC
E08911	S89G179T30NA11	LVDS ASSY
	071FW100001012	40*12*6.5-1.5+h/s
	044F3231 167C4	5760 30*10*0.8

Diversity of TA8CMUNJWMDDBC compared with TA8CMUHKWMDDBZ		
Location	**Part No.**	**Description**
	044G9003194	CORNER PAPER
	089G401A18NHRA	POWER CORD
E750	750GLCA1WAA33D000D	PANEL CLAA201WA04A 336 FZ CPT
	Q07G 1 5D36 X	WOODEN PALLET
	Q41G7800700A26	SP2009W QSG FOR EAST
	Q41G7800700A28	PIG FOR APCC

Diversity of TA8GMUNMWMDLBC compared with TA8CMUHKWMDDBZ		
Location	**Part No.**	**Description**
E750L	750GLGA1W3J21D000D	PANEL LM201WE3-TLJ1 KR LGD
	A15G0425101	MAINFRAME LPL
	A34G0791 VHA1B0130	REAR COVER L20W-8DELL2
	CBPC8GMUDLQ1	MAIN BOARD G3079-1-X-X-1-080520
FOR U401	090G 372 2	HEAT SINK
	715G3079 D HF	MAIN PCB FR-4 120X159X1.6MM 4/L
	PWPC8A42LAA1	POWER BOARD G2778-1-X-X-2-080506
C811	065G 6J5096ET	CAP CER 5PF J 6KV
C801	065G 6J5096ET	CAP CER 5PF J 6KV
	Q41G7800700A26	SP2009W QSG FOR EAST
	Q41G7800700A28	PIG FOR APCC
	Q44G6002112 94	PAPER BOARD
E08911	S89G179T30NA11	LVDS ASSY
	071FW100001012	40*12*6.5-1.5+H/S
	044F3231 167C4	5760 30*10*0.8

Diversity of TA8CMUNMWMDLBC compared with TA8CMUHKWMDDBZ		
Location	**Part No.**	**Description**
E750	750GLCA1WAA33D000D	PANEL CLAA201WA04A 336 FZ CPT
	Q41G7800700A26	SP2009W QSG FOR EAST
	Q41G7800700A28	PIG FOR APCC

Diversity of TA8GMUNFWMDLBC compared with TA8CMUHKWMDDBZ		
Location	**Part No.**	**Description**
E750L	750GLGA1W3J21D000D	PANEL LM201WE3-TLJ1 KR LGD
	A15G0425101	MAINFRAME LPL
	A34G0791 VHA1B0130	REAR COVER L20W-8DELL2
	CBPC8GMUDLQ1	MAIN BOARD G3079-1-X-X-1-080520
FOR U401	090G 372 2	HEAT SINK
	715G3079 D HF	MAIN PCB FR-4 120X159X1.6MM 4/L
	PWPC8A42LAA1	POWER BOARD G2778-1-X-X-2-080506
C811	065G 6J5096ET	CAP CER 5PF J 6KV
C801	065G 6J5096ET	CAP CER 5PF J 6KV
	Q41G7800700A26	SP2009W QSG FOR EAST
	Q41G7800700A28	PIG FOR APCC
	Q44G6002112 94	PAPER BOARD
E08911	S89G179T30NA11	LVDS ASSY
	071FW100001012	40*12*6.5-1.5+H/S
	044F3231 167C4	5760 30*10*0.8

Diversity of TA8CMUNFWMDLBC compared with TA8CMUHKWMDDBZ		
Location	**Part No.**	**Description**
E750	750GLCA1WAA33D000D	PANEL CLAA201WA04A 336 FZ CPT
	Q41G7800700A26	SP2009W QSG FOR EAST
	Q41G7800700A28	PIG FOR APCC

Diversity TA8GMUHKWMDDBC of compared with TA8CMUHKWMDDBZ			
Location	**Part No.**	**Description**	**Remark**
E08911	089G179E30NA11	FFC CABLE	
	0M1G3130 5125	SCREW	
E750L	750GLGA1W3J21D000D	PANEL LM201WE3-TLJ1 KR LGD	
E750L	750GLGA1W3J32D000D	PANEL LM201WE3-TLJ3 NJ LGD	2nd source
	A15G0425101	Mainframe LPL	
	A34G0791 VHA1B0130	REAR COVER L20W-8DELL2	
	CBPC8GMUDLQ1	MAIN BOARD G3079-1-X-X-1-080526	
FOR U401	090G 372 2	HEAT SINK	
	PWPC8A42LAA1	POWER BOARD G2778-1-X-X-2-080616	
C811	065G 6J5096ET	CAP CER 5PF J 6KV	
C801	065G 6J5096ET	CAP CER 5PF J 6KV	
L921	073G 253 91 H	CHOKE COIL	
L922	073G 253 91 H	CHOKE COIL	
E08911	S89G179T30NA11	LVDS ASSY	
	071FW100001012	40*12*6.5-1.5+h/s	
	044F3231 167C4	5760 30*10*0.8	

Diversity of TA8GMUNKWMDDBC compared with TA8CMUHKWMDDBZ			
Location	**Part No.**	**Description**	**Remark**
E08911	089G179E30NA11	FFC CABLE	
	0M1G3130 5125	SCREW	
E750L	750GLGA1W3J21D000D	PANEL LM201WE3-TLJ1 KR LGD	
E750L	750GLGA1W3J32D000D	PANEL LM201WE3-TLJ3 NJ LGD	2nd source
	A15G0425101	Mainframe LPL	
	A34G0791 VHA1B0130	REAR COVER L20W-8DELL2	
	CBPC8GMUDLQ1	MAIN BOARD G3079-1-X-X-1-080526	
FOR U401	090G 372 2	HEAT SINK	
	PWPC8A42LAA1	POWER G2778-1-X-X-2-080616	
C811	065G 6J5096ET	CAP CER 5PF J 6KV	
C801	065G 6J5096ET	CAP CER 5PF J 6KV	
L921	073G 253 91 H	CHOKE COIL	
L922	073G 253 91 H	CHOKE COIL	
E08911	S89G179T30NA11	LVDS ASSY	
	071FW100001012	40*12*6.5-1.5+h/s	
	044F3231 167C4	5760 30*10*0.8	

Diversity of TA8CMUNKWMDDBC compared with TA8CMUHKWMDDBZ			
Location	**Part No.**	**Description**	**Remark**
E750	750GLCA1WAA32D000D	PANEL CLAA201WA04A 336 WJ CPT	2nd source
E750	750GLCA1WAA33D000D	PANEL CLAA201WA04A 336 FZ CPT	
E750	750GLCA1WAA42D000D	PANEL CLAA201WA04A 347 WJ CPT	2nd source
E750	750GLCA1WAA43D000D	PANEL CLAA201WA04A 347 FZ CPT	2nd source

Diversity of TA8GMUNKWMDDBZ compared with TA8CMUHKWMDDBZ			
Location	**Part No.**	**Description**	**Remark**
E08911	089G179E30NA11	FFC CABLE	
	0M1G3130 5125	SCREW	
E750L	750GLGA1W3J21Z000D	PANEL LM201WE3-TLJ1 KR LPL	
E750L	750GLGA1W3J32Z000D	PANEL LM201WE3-TLJ3 NJ LPL	2nd source
	A15G0425101	Mainframe LPL	
	A34G0791 VHA1B0130	REAR COVER L20W-8DELL2	
	CBPC8GMUDLQ1	MAIN BOARD G3079-1-X-X-1-080526	
FOR U401	090G 372 2	HEAT SINK	
	PWPC8A42LAA1	POWER G2778-1-X-X-2-080616	
C811	065G 6J5096ET	CAP CER 5PF J 6KV	
C801	065G 6J5096ET	CAP CER 5PF J 6KV	
L921	073G 253 91 H	CHOKE COIL	
L922	073G 253 91 H	CHOKE COIL	
L921	S73G25391V	CHOKE COIL ASS'Y	
E08911	S89G179T30NA11	LVDS ASSY	
	071FW100001012	40*12*6.5-1.5+h/s	
	044F3231 167C4	5760 30*10*0.8	

Diversity of TA8GMUNBWMDDBCcompared with TA8CMUHKWMDDBZ			
Location	**Part No.**	**Description**	**Remark**
E08911	089G179E30NA11	FFC CABLE	
	0M1G3130 5125	SCREW	
E750L	750GLGA1W3J21D000D	PANEL LM201WE3-TLJ1 KR LGD	
E750L	750GLGA1W3J32D000D	PANEL LM201WE3-TLJ3 NJ LGD	2nd source
	A15G0425101	Mainframe LPL	
	A34G0791 VHA1B0130	REAR COVER L20W-8DELL2	
	CBPC8GMUDLQ1	MAIN BOARD G3079-1-X-X-1-080526	
FOR U401	090G 372 2	HEAT SINK	
	PWPC8A42LAA1	POWER G2778-1-X-X-2-080616	

C811	065G 6J5096ET	CAP CER 5PF J 6KV	
C801	065G 6J5096ET	CAP CER 5PF J 6KV	
L921	073G 253 91 H	CHOKE COIL	
L922	073G 253 91 H	CHOKE COIL	
	Q41G7800700A29	PIG FOR EMEA	
E08911	S89G179T30NA11	LVDS ASSY	
	071FW100001012	40*12*6.5-1.5+h/s	
	044F3231 167C4	5760 30*10*0.8	

Diversity of TA8CMUNBWMDDBC compared with TA8CMUHKWMDDBZ			
Location	**Part No.**	**Description**	**Remark**
E750	750GLCA1WAA32D000D	PANEL CLAA201WA04A 336 WJ CPT	2nd source
E750	750GLCA1WAA33D000D	PANEL CLAA201WA04A 336 FZ CPT	
E750	750GLCA1WAA42D000D	PANEL CLAA201WA04A 347 WJ CPT	2nd source
E750	750GLCA1WAA43D000D	PANEL CLAA201WA04A 347 FZ CPT	2nd source
	Q41G7800700A29	PIG FOR EMEA	

Diversity of TA8GMUNBWMDDBZ compared with TA8CMUHKWMDDBZ			
Location	**Part No.**	**Description**	**Remark**
E08911	089G179E30NA11	FFC CABLE	
	0M1G3130 5125	SCREW	
E750L	750GLGA1W3J21Z000D	PANEL LM201WE3-TLJ1 KR LPL	
E750L	750GLGA1W3J32Z000D	PANEL LM201WE3-TLJ3 NJ LPL	2nd source
	A15G0425101	Mainframe LPL	
	A34G0791 VHA1B0130	REAR COVER L20W-8DELL2	
	CBPC8GMUDLQ1	MAIN BOARD G3079-1-X-X-1-080526	
FOR U401	090G 372 2	HEAT SINK	
	PWPC8A42LAA1	POWER G2778-1-X-X-2-080616	
C811	065G 6J5096ET	CAP CER 5PF J 6KV	
C801	065G 6J5096ET	CAP CER 5PF J 6KV	
L921	073G 253 91 H	CHOKE COIL	
L922	073G 253 91 H	CHOKE COIL	
E08911	S89G179T30NA11	LVDS ASSY	
	071FW100001012	40*12*6.5-1.5+h/s	
	044F3231 167C4	5760 30*10*0.8	

Diversity of TA8CMUNBWMDDBZ compared with TA8CMUHKWMDDBZ			
Location	**Part No.**	**Description**	**Remark**
	Q41G7800700A29	PIG FOR EMEA	

Diversity of TA8GMUNBWMDD4C compared with TA8CMUHKWMDDBZ			
Location	**Part No.**	**Description**	**Remark**
	044G9003194	CORNER PAPER	
	Q07G 8 1 11	COMPOUND PALLET	
	Q07G 8 3151	COMPOUND PALLET	
	Q44G600022D 1A	CARTON	
	Q44GA053700 3B	CARTON	
	Q45G 88609 75 R	EPE BAG	
	040G 581654 3A	CARTON LABEL	
	Q40G 582813 3A	S/N LABEL	
	052G 1185 1	BIG TAPE	
	705GQ8SK038	20” DELL SKD KITS ASS’Y	
E08911	089G179E30NA11	FFC CABLE	
	0M1G2940 10225 CR3	SCREW	
	A15G0425101	Mainframe LPL	
	A34G0791 VHA1B0130	REAR COVER L20W-8DELL2	
	CBPC8GMUDLQ1	MAIN BOARD G3079-1-X-X-1-080526	
	051G6002 2 GP	ACCELERANT	
	051G6002 3 GP	thermal adhesive	
FOR U401	090G 372 2	HEAT SINK	
	PWPC8A42LAA1	POWER G2778-1-X-X-2-080616	
C801	065G 6J5096ET	CAP CER 5PF J 6KV	
C811	065G 6J5096ET	CAP CER 5PF J 6KV	
L922	073G 253 91 H	CHOKE COIL	
L921	073G 253 91 H	CHOKE COIL	
L922	S73G25391V	CHOKE COIL ASS'Y	
	705GQ8SK040	20” DELL SKD BEZEL ASS’Y	
E750L	750GLGA1W3J21D000D	PANEL LM201WE3-TLJ1 KR LGD	2nd source
E750L	750GLGA1W3J32D000D	PANEL LM201WE3-TLJ3 NJ LGD	2nd source
	Q40G 20N700 8A	Rating label	
	Q41G7800700A29	PIG FOR EMEA	
	Q44G600027V 9A	Carton	

Diversity of TA8CMUNBWMDD4C compared with TA8CMUHKWMDDBZ			
Location	**Part No.**	**Description**	**Remark**
	044G9003194	CORNER PAPER	
	052G 1185 1	BIG TAPE	
E750	750GLCA1WAA32D000D	PANEL CLAA201WA04A 336 WJ CPT	2nd source
E750	750GLCA1WAA33D000D	PANEL CLAA201WA04A 336 FZ CPT	2nd source
E750	750GLCA1WAA42D000D	PANEL CLAA201WA04A 347 WJ CPT	2nd source
E750	750GLCA1WAA43D000D	PANEL CLAA201WA04A 347 FZ CPT	2nd source
	Q07G 8 1 11	COMPOUND PALLET	
	Q07G 8 3151	COMPOUND PALLET	
	Q40G 20N700 8A	Rating label	
	Q41G7800700A29	PIG FOR EMEA	
	Q44G600022D 1A	CARTON	
	Q44G600027V 9A	Carton	
	Q44GA053700 3B	CARTON	
	Q45G 88609 75 R	EPE BAG	
	040G 581654 3A	CARTON LABEL	
	Q40G 582813 3A	S/N LABEL	
	705GQ8SK039	20” DELL SKD KITS ASS’Y	
	0M1G2940 10225 CR3	SCREW	
	705GQ8SK040	20” DELL SKD BEZEL ASS’Y	

Diversity of TA8GMUNKWMDRBZ compared with TA8CMUHKWMDDBZ			
Location	**Part No.**	**Description**	**Remark**
	0M1G3130 5125	SCREW	
E750	750GLG201W3L22Z0DL	PANEL LM201WE3-TLL2 NJ LGD	
	A15G0425101	MAINFRAME LPL	
	A34G0791 VHA1B0130	REAR COVER L20W-8DELL2	
	CBPC8GMUDLQ1	MAIN BOARD G3079-1-X-X-1-080902	
FOR U401	051G6002 2 GP	ACCELERANT	
FOR U401	051G6002 3 GP	THERMAL ADHESIVE	
FOR U401	090G 372 2	HEAT SINK	
	PWPC8A42LAA2	POWER G2778-1-X-X-5-081023	
C811	065G 6J5096ET	CAP CER 5PF J 6KV	
C801	065G 6J5096ET	CAP CER 5PF J 6KV	
L921	073G 253 91 H	CHOKE COIL	
L922	073G 253 91 H	CHOKE COIL	
L921	073G 253 91 V	CHOKE COIL 3.5UH+-10%	
L922	073G 253 91 V	CHOKE COIL 3.5UH+-10%	

R861	061G0603150 3F	RST CHIPR 150 KOHM +-1% 1/10W	
	Q41G7800700A62	PIG FOR DAO	
	Q41G7800700A73	TECH SHEET FOR SP2009WC	
	Q70G2002700 4C	SP2009W CD MANUAL	
	S89G179T30NA11	LVDS ASSY	